SAMSUNG

Discover

the Possibilities

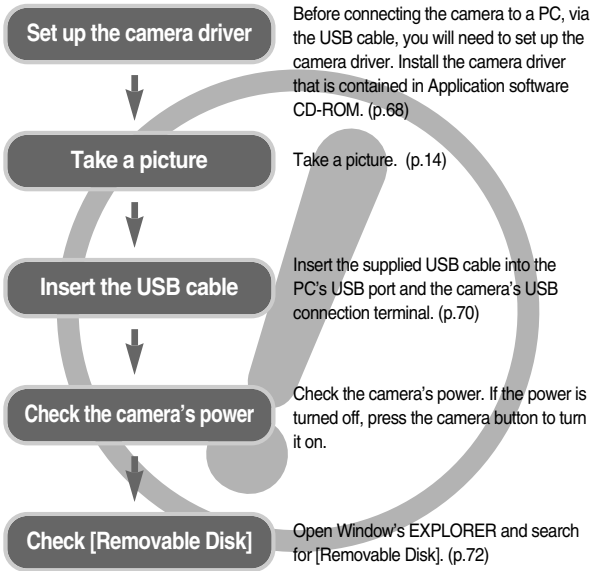
S1030 User's Manual

Thank you for buying a Samsung Camera.
This manual will guide you through using the camera, including capturing images, downloading images and using the application software.
Please read this manual carefully before using your new camera.

ENGLISH

Instructions

■ Use this camera in the following order


Set up the camera driver
Before connecting the camera to a PC, via the USB cable, you will need to set up the camera driver. Install the camera driver that is contained in Application software CD-ROM. (p.68)
Take a picture
Take a picture. (p.14)
Insert the USB cable
Insert the supplied USB cable into the PC's USB port and the camera's USB connection terminal. (p.70)
Check the camera's power
Check the camera's power. If the power is turned off, press the camera button to turn it on.
Check [Removable Disk]
Open Window's EXPLORER and search for [Removable Disk]. (p.72)

- If you use a card reader to copy the images on the memory card to your PC, the images could be damaged. When transferring the images taken with the camera to your PC, be sure to use the supplied USB cable to connect the camera to your PC. Please note that the manufacturer holds no responsibility for loss or damage of images on the memory card due to the use of a card reader.

Getting to know your camera

Thank you for buying a Samsung Digital Camera.

- Prior to using this camera, please read the user manual thoroughly.
- When you require After Sales service, please bring the camera and the cause of the camera malfunction (such as battery, Memory card etc.) to the A/S centre.
- Please check that the camera is operating properly prior to when you intend to use it (e.g. for a trip or an important event) to avoid disappointment. Samsung camera takes no responsibility for any loss or damages that may result from camera malfunction.
- Keep the manual in a safe place.

* Microsoft, Windows and Windows logo are registered trademarks of Microsoft Corporation incorporated in the United States and/or other countries.
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* The contents and illustrations of this manual are subject to change without prior notice for upgrading the camera functions.

eco
RoHS compliant

Samsung Techwin cares for the environment at all product manufacturing stages to preserve the environment, and is taking a number of steps to provide customers with more environment-friendly products.The Eco mark represents Samsung Techwin's will to create environment-friendly products, and indicates that the product satisfies the EU RoHS Directive.

Danger

DANGER indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.

- Do not attempt to modify this camera in any way. This may result in fire, injury, electric shock or severe damage to you or your camera. Internal inspection, maintenance and repairs should be carried out by your dealer or Samsung Camera Service centre.
- Please do not use this product in close proximity to flammable or explosive gases, as this could increase the risk of explosion.
- Should any form of liquid or a foreign object enter the camera, do not use it. Switch off the camera, and then disconnect the power source. You must contact your dealer or Samsung Camera Service centre. Do not continue to use the camera as this may cause a fire or electric shock.
- Do not insert or drop metallic or inflammable foreign objects into the camera through access points e.g. the memory card slot and battery chamber. This may cause a fire or electric shock.
- Do not operate this camera with wet hands. This could pose a risk of electric shock.

Warning

WARNING indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

- Do not use the flash in close proximity to people or animals. Positioning the flash too close to your subject's eyes may cause eyesight damage.
- For safety reasons keep this product and accessories out of reach of children or animals to prevent accidents e.g.:
  - Swallowing battery or small camera accessories. If an accident should occur, please consult a doctor immediately.
  - There is the possibility of injury from the camera's moving parts.
- Battery and camera may become hot during prolonged use and it may result in camera malfunction. Should this be the case, allow the camera to sit idle for a few minutes to allow it time to cool.
- Do not leave this camera in places subject to extremely high temperatures, such as a sealed vehicle, direct sunlight or other places of extreme variances in temperature. Exposure to extreme temperatures may adversely affect the camera's internal components and could cause a fire.
- When in use, do not cover the camera or Charger. This may cause heat to build up and distort the camera body or cause a fire. Always use the camera and its accessories in a well-ventilated area.

Caution

CAUTION indicates a potentially hazardous situation which, if not avoided, may result in a minor or moderate injury.

- Leaking, overheating, or burst battery could result in fire or injury.
  - Use battery with the correct specification for the camera.
  - Do not short circuit, heat or dispose of battery in fire.
  - Do not insert the battery with the polarities reversed.
- Remove the battery when not planning to use the camera for a long period of time. Battery may leak corrosive electrolyte and permanently damage the camera's components.
- Do not fire the flash while it is in contact with hands or objects. Do not touch the flash after using it continuously. It may cause burns.
- Do not move the camera while it is switched on, if you are using the AC Charger. After use, always switch off the camera before unplugging the cable from the wall socket. Then make sure that any connector cords or cables to other devices are disconnected before moving the camera. Failure to do so may damage the cords or cables and cause a fire or electric shock.
- Take care not to touch the lens or lens cover to avoid taking an unclear image and possibly causing camera malfunction.
- Avoid obstructing the lens or the flash when you capture an image.
- Credit cards may be demagnetized if left near case. Avoid leaving magnetic strip cards near the case.
- After turning on the camera, Check whether the battery type and the camera setting set on the [Setup] > [Battery Type] menu (p.60) are same or not.

Contents

READY

- System chart ····4
- Identification of features ····5
  - Front & Top····5
  - Back & Bottom ····6
  - Bottom / 5-function button ····7
  - Self-timer lamp ····8
  - Camera Status Lamp ····8
  - Mode icon ····8
- Connecting to a Power Source ····8
- Inserting the memory card ····9
- Instructions on how to use the memory card ····10
- When Using the Camera for the First Time ····12

RECORDING

- LCD monitor indicator ····13
- Starting the recording mode ····14
  - How to use the AUTO mode ····14
  - How to use the PROGRAM mode ···14
  - How to use the MANUAL mode ···14
  - How to use the MOVIE CLIP mode···15
  - Recording the movie clip without voice···15
  - Pausing while recording a movie clip···15
  - Night / Portrait / Children mode ···16
  - How to use the SCENE mode ···16
  - How to use the VOICE RECORDING mode ····17
- Things to Watch Out for When Taking Pictures ····17
- Using the camera buttons to set the camera ····18
  - POWER button ····18
  - Shutter button ····18
  - ZOOM W / T button ····18
  - Voice recording / Voice memo / UP button ····20
  - Macro / Down button ····20
  - Focus lock ····21
  - Flash / Left button ····22
  - Self-timer / Right button ····23
  - MENU / OK button ····24
  - E (Effect) button ····25
  - Special Effect : Colour ····25
  - Special Effect : Preset focus frames···26
  - Special Effect : Composite shooting···27
  - Special Effect : Photo Frame ····28
  - Movie Clip frame stabiliser ····29
  - + / - button ····29
- Using the LCD monitor to set the camera settings····32
  - How to use the menu ····32
  - Size ····33
  - Quality / Frame rate····33
  - Metering ····34
  - Continuous shot ····34
  - Sharpness ····35
  - OSD (On Screen Display) information ····35

PLAY

- Starting play mode ····36
  - Playing back a still image ····36
  - Playing back a movie clip ····36
  - How to capture the movie clip ···37
  - Playing back a recorded voice ···38
- LCD monitor Indicator ····38
- Using the camera buttons to set the camera ····39
  - Thumbnail / Enlargement button ···39
  - Voice memo / Up button ····40
  - Play & Pause / Down button ····41
  - E (Effect) button ····41
  - Delete button ····42
  - Printer button ····42
  - Left / Right / Menu / OK button ···43
- Setting up the play back function using the LCD monitor ····43
  - Starting the slide show ····45
  - Protecting images ····46
  - Deleting images ····47
  - Resize ····47
  - Rotating an image ····48
  - DPOF ····48
  - DPOF : Standard····49
  - DPOF : Index ····49
  - DPOF : Print size····50
  - Copy To Card ····50
  - On Screen Display information ···51
  - PictBridge ····51
  - PictBridge : Picture Selection ····52
  - PictBridge : Print Setting ····52
  - PictBridge : Printing ····53
  - PictBridge : DPOF Printing ····54
  - PictBridge : Reset ····54

SETUP

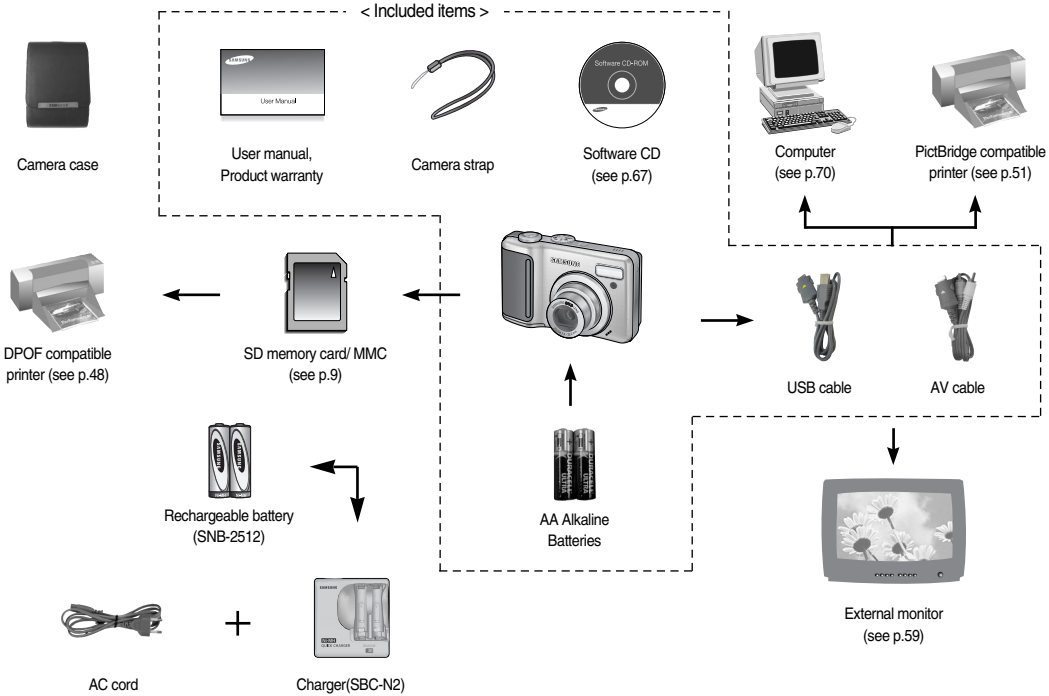
- Setup menu ····54
  - File name ····55
  - Auto power off ····56
  - Language ····56
  - Formatting a memory ····57
  - Setting up the Date / Time / Date type ···57
  - Imprinting the recording date ····57
  - Sound ····58
  - Connecting an External Device (USB) ···58
  - Auto Focus lamp ····58
  - LCD brightness ····58
  - Selecting Video out type ····59
  - Quick view ····59
  - Initialisation ····60
  - Selecting a battery type ····60
- Setting up the Mycam menu ····60
  - Start up image ····60
  - Start up sound ····61
  - Shutter sound ····61
- Important notes ····61
- Warning indicator ····63
- Before contacting a service centre ···63
- Specifications ····65

SOFTWARE

- Software Notes ····67
- System Requirements ····67
- About the software ····67
- Setting up the application software ···68
- Starting PC mode ····70
- Removing the removable disk ····72
- Setting up the USB Driver for MAC ···72
- Using the USB Driver for MAC ···72
- Removing the USB Driver for Windows 98SE ····73
- Digimax Master····73
- FAQ ····76

System chart

Please check that you have the correct contents before using this product. The contents can vary depending on the sales region. To buy the optional equipment, contact your nearest Samsung dealer or Samsung service centre.

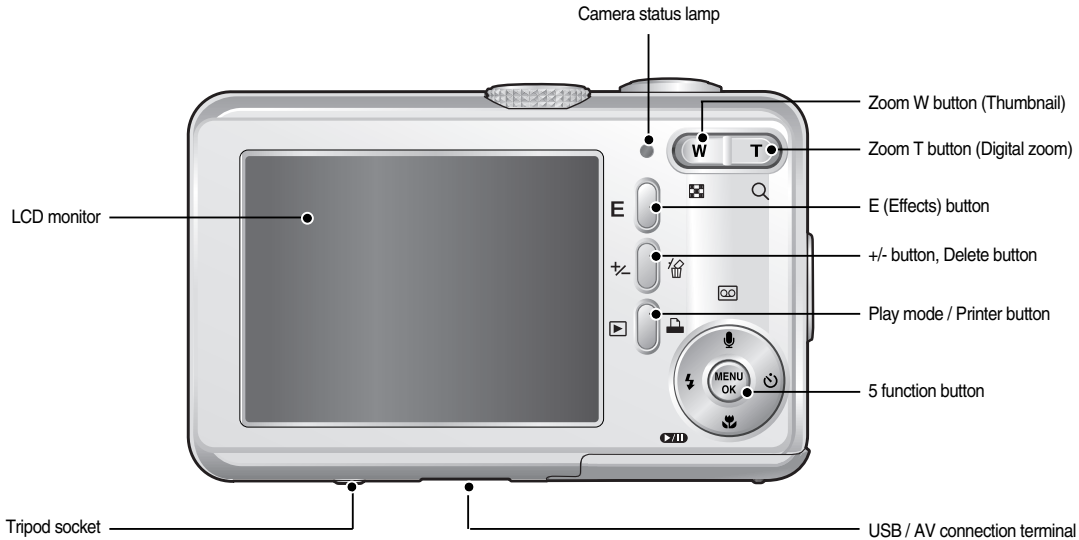


Identification of features

Front & Top

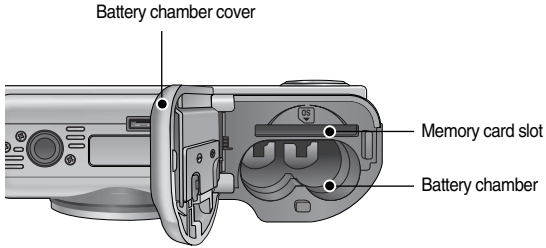
Identification of features

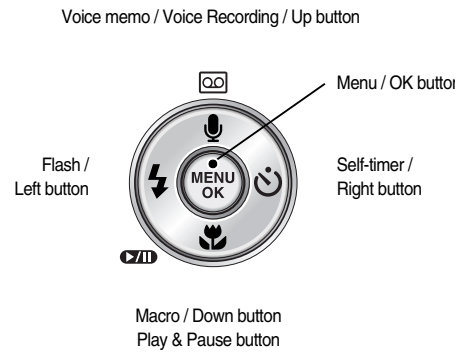
Back & Bottom



Identification of features

Bottom / 5-function button





Identification of features

■ Self-timer lamp

Icon	Status	Description
	Blinking	For the first 8 seconds, the lamp blinks at 1 second intervals. For the final 2 seconds, the lamp blinks quickly at 0.25-second intervals.
	Blinking	For the 2 seconds, the lamp blinks quickly at 0.25-second intervals before taking a picture
	Blinking	A picture will be taken after about 10 seconds and 2 seconds later a second picture will be taken.

■ Camera Status Lamp

Status	Description
Power on	The lamp turns on and off when the camera is ready to take a picture
After taking a picture	The lamp blinks while saving the image data and turns off when the camera is ready to take a picture
While voice memo recording	The lamp blinks
While voice recording	The lamp blinks
Transmitting Data with a PC	The lamp turns on (LCD monitor turns off)
When the USB cable is inserted to a printer	The lamp is off
When the printer is printing	The lamp blinks
When the AF activates	The lamp turns on (The camera focus on the subject)
	The lamp blinks (The camera doesn't focus on the subject)

■ Mode icon: Refer to page 14~17 for more information about the camera mode setting.

MODE	AUTO	PROGRAM	MANUAL	NIGHT	PORTRAIT
Icon					
MODE	CHILDREN	MOVIE	VOICE RECORDING	PLAY	-
Icon					-

MODE	SCENE						
	LANDSCAPE	CLOSE UP	SUNSET	DAWN	BACKLIGHT	FIREWORKS	BEACH & SNOW
Icon							

Connecting to a Power Source

■ We recommend using battery supplied with the camera. The available batteries are listed below.
- Non rechargeable batteries : 2 X AA Alkaline (High Capacity)
- Rechargeable batteries : SNB-2512 (Ni-MH)

■ SNB-2512 specification(optional)

Model	SNB-2512
Type	Ni-MH
Capacity	2500mAh
Voltage	1.2V x 2
Charging time	Approximately 300 Minutes(Use for SBC-N2)

※ Included battery may vary depending on sales region.

Connecting to a Power Source

INFORMATION

Important information about battery usage

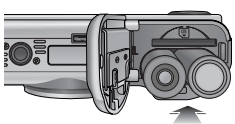
- When the camera is not used, turn off the camera power.
- Please remove the battery if the camera will not be used for long periods. Battery can lose power over time and are prone to leaking if kept inside the camera.
- Low temperatures (below 0˚C) can affect the performance of the battery and you may experience reduced battery life.
- Batteries will usually recover at normal temperatures.
- During extended use of the camera, the camera body may become warm. This is perfectly normal.

■ There are 4 indicators for battery condition that are displayed on the LCD monitor.

Battery indicator				
Battery status	The battery is fully charged	Low battery capacity (Prepare to recharge or use spare battery)	Low battery capacity (Prepare to recharge or use spare battery)	Low battery capacity (Prepare to recharge or use spare battery)

■ Insert the battery as shown

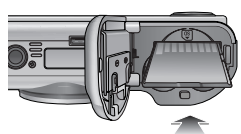
- If the camera does not turn on after you have inserted battery, please check whether the battery is inserted with the correct polarity (+ / -).
- When the battery chamber cover is opened, do not press the battery chamber cover by force. This may cause damage to the battery chamber cover.



Inserting the memory card

■ Insert the memory card as shown.

- Turn off the camera's power before inserting the memory card.
- Have the front of the memory card facing toward the front of the camera (lens) and the card pins toward the back of the camera (LCD monitor).
- Do not insert the memory card the wrong way round. Doing so may damage the memory card slot.



Instructions on how to use the memory card

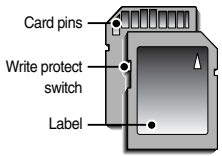
- Be sure to format the memory card (see p.57) if you are using a newly purchased memory for the first time, if it contains data that the camera cannot recognise, or if it contains images captured with a different camera.
- Turn off the camera power whenever the memory card is being inserted or removed.
- Repeated use of the memory card will eventually reduce the memory card's performance. Should this be the case, you will need to purchase a new memory card. Wear and tear on the memory card is not covered by the Samsung warranty.
- The memory card is an electronic precision device.
  Do not bend, drop or subject the memory card to any heavy impact.
- Do not store the memory card in an environment with strong electronic or magnetic fields, e.g. near loud speakers or TV receivers.
- Please do not use or store in an environment where there are extremes in temperature.
- Do not allow the memory card to become dirty or to come into contact with any liquid. Should this happen, clean the memory card with a soft cloth.
- Please keep the memory card in its case when not in use.
- During and after periods of extended use, you may notice that the memory card is warm. This is perfectly normal.
- Do not use a memory card that is used in another digital camera.
  To use the memory card in this camera, format the memory card using this camera.
- Do not use a memory card formatted by another digital camera or memory card reader.
- If the memory card is subjected to any of the following, the recorded data may become corrupted :
  - When the memory card is used incorrectly.
  - If the power is switched off or the memory card is removed while recording, deleting (formatting) or reading.
- Samsung cannot be held responsible for lost data.
- It is advisable to copy important data onto other media as back-up e.g. floppy disks, hard disks, CD etc.
- If there is insufficient memory available
  : A [Memory Full!] message will appear and the camera will not operate.
  To optimise the amount of memory in the camera, replace the memory card or delete unnecessary images stored on the memory card.

Instructions on how to use the memory card

INFORMATION

- Don't remove the memory card when the camera status lamp is blinking as this may cause damage to data in the memory card.

■ The camera can use SD Memory Cards and MMC (Multi Media Cards).



[SD (Secure Digital) memory card]

The SD memory card has a write protect switch that prevents image files from being deleted or formatted. By sliding the switch to the bottom of the SD memory card, the data will be protected. By sliding the switch to the top of the SD memory card, the data protection will be cancelled.
Slide the switch to the top of the SD memory card before taking a picture.

■ When using a 256MB MMC (Multi Media Card), the specified shooting capacity will be as follows. These figures are approximate as image capacities can be affected by variables such as subject matter and memory card type.

Recorded image size		Super Fine	Fine	Normal	30FPS	15FPS
Still image	10M	48	94	109	-	-
	9M	53	104	151	-	-
	8M	60	115	169	-	-
	7M	67	128	197	-	-
	6M	80	157	223	-	-
	5M	93	181	264	-	-
	4M	121	226	279	-	-
	3M	148	284	400	-	-
	2M	244	434	520	-	-
	1M	520	868	1041	-	-
	VGA	1041	1116	1302	-	-
* Movie clip	640	-	-	-	About 13'	About 21'
	320	-	-	-	About 36'	About 60'
	160	-	-	-	About 73'	About 133'

※ The recording times can be changed by the zoom operation.
The zoom button doesn't use during the movie recording.

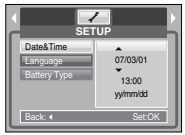
When Using the Camera for the First Time

■ Charge the rechargeable battery fully before using the camera for the first time.

■ When the camera is turned on for the first time, a menu will be displayed to set date / time, language and battery type in the LCD monitor. This menu will not be displayed after setting up. Set up the date / time, language and battery type before using this camera.

● Setting up the date, time and date type

1. Select the [Date&Time] menu by pressing the UP / DOWN button and press the RIGHT button.
2. Select the desired sub menu by pressing the UP / DOWN / LEFT / RIGHT button and press the OK button.



RIGHT button : Selects YEAR / MONTH / DAY / HOUR / MINUTE / DATE TYPE

LEFT button : Moves the cursor to the [Date&Time] main menu if the cursor is at the first item of the date and time setup. In all other instances, the cursor will be shifted to the left of its current position.

UP/ DOWN button : Changes the value of each item.

● Setting up the language

1. Select the [Language] menu by pressing the UP / DOWN button and press the RIGHT button.
2. Select the desired sub menu by pressing the UP / DOWN button and press the OK button.

INFORMATION

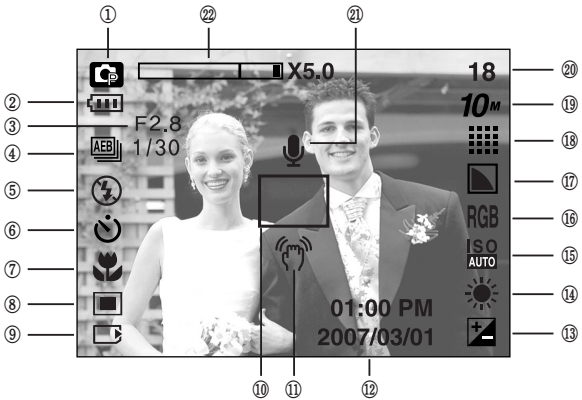
- You can select one of 22 languages. These are listed below :
  - English, Korean, French, German, Spanish, Italian, S.Chinese, T.Chinese, Japanese, Russian, Portuguese, Dutch, Danish, Swedish, Finnish, Thai, BAHASA(MALAY/ INDONESIAN), Arabic, Czech, Polish, Hungarian and Turkish.
- Even if the camera is restarted, the language setting will be maintained.

● Setting up the battery type

1. Select the [Battery Type] menu by pressing the UP / DOWN button and press the RIGHT button.
2. Select the desired sub menu by pressing the UP / DOWN button and press the OK button.

LCD monitor indicator

■ The LCD monitor displays information about the shooting functions and selections.



[Image & Full Status]

No.	Description	Icons	Page
1	Recording mode		p.14~17
2	Battery		p.9
3	Aperture Value / Shutter Speed	F2.8, 1/30	p.14

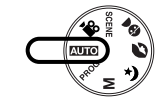
No.	Description	Icons	Page
4	Continuous shot		p.34
5	Flash / Without Sound		p.22~23/15
6	Self-timer		p.23~24
7	Macro		p.20~21
8	Metering		p.34
9	Card inserted indicator		-
10	Auto focus frame		-
11	Camera shake warning		p.17
12	Date / Time	2007/03/01 01:00 PM	p.57
13	Exposure compensation		p.31
14	White Balance	AWB	p.30~31
15	ISO	ISO AUTO ISO 80 ISO 100 ISO 200 ISO 400 ISO 800 ISO 1000	p.30
16	RGB	RGB	p.29
17	Sharpness		p.35
18	Image quality / Frame rate		p.33
19	Image size	10M 9M 8M 7M 6M 5M 4M 3M 2M 1M VGA 640 320 160	p.33
20	Number of available shots remaining	18	p.11
	Remaining time (Movie clip/ Voice recording)	00:01:30/ 01:00:00	p.11
21	Voice memo		p.17/20
22	Optical/ Digital Zoom bar/ Digital Zoom rate	X5.0	p.18~19

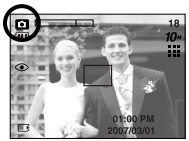
Starting the recording mode

■ How to use the AUTO mode (**AUTO**)

Please select this mode for quick and easy picture taking with minimal user interaction.

1. Insert the batteries (p.9). Insert the batteries taking note of the polarity (+ / -).
2. Insert the memory card (p.9). As this camera has a 45MB internal memory, you do not need to insert the memory card. If the memory card is not inserted, an image will be stored in the internal memory. If the memory card is inserted, an image will be stored on the memory card.
3. Close the battery chamber cover.
4. Press the power button to turn on the camera. (If the date/ time that is displayed on the LCD monitor is incorrect, reset the date / time before taking a picture.)
5. Select the AUTO mode by rotating the mode dial.
6. Point the camera towards the subject and compose the image by using the LCD monitor.
7. Press the shutter button to capture an image.





[AUTO mode]

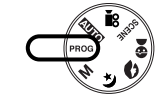
INFORMATION

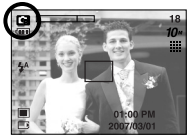
- If the auto focus frame turns to red when you press the shutter button down half way, it means that the camera cannot focus on the subject. Should this be the case, the camera is unable to capture an image clearly.

■ How to use the PROGRAM mode (**PROG**)

Selecting the automatic mode will configure the camera with optimal settings. You can still manually configure all functions except the aperture value and shutter speed.

1. Select the PROGRAM mode by rotating the mode dial.
2. Press the menu button to configure advanced functions such as image size (p.33), quality (p.33), metering (p.34), continuous shooting (p.34) and special effects (p.25).



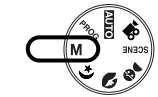


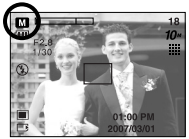
[PROGRAM mode]

■ How to use the MANUAL mode (**M**)

You can manually configure all functions with the aperture value and shutter speed.

1. Select the MANUAL mode by rotating the mode dial.
2. Press the + / - button and menu for the shutter speed and aperture value will display.
   Up / Down button : changes aperture value
   Left / Right button : changes shutter speed.
3. Press the + / - button twice and take an image.





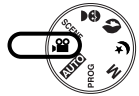
[MANUAL mode]

* Smaller Aperture values make the object sharp but blur the background. Larger Aperture values make both the object and background sharp.

* High Shutter speeds can capture a moving object in a still image as if the object is not moving. Low Shutter speeds can capture a moving object with an 'active' effect.

Starting the recording mode

■ How to use the MOVIE CLIP mode ( )
A movie clip can be recorded for as long as the available recording time of the memory capacity allows.



1. Select the MOVIE CLIP mode by rotating the mode dial.
2. The MOVIE CLIP mode icon and available recording time will display on the LCD monitor.
3. Point the camera towards the subject and compose the image by using the LCD monitor. Press the shutter button and movie clips are recorded for as long as the available recording time. Movie clips will still be recorded if the shutter button is released.
   If you wish to stop recording, press the shutter button again.
   * Image size and type are listed below.
   - Image size : 640X480, 320X240, 160X128 (Selectable)
   - File type : *.avi (MPEG-4)

[MOVIE CLIP mode]

■ Recording the movie clip without voice
You can record the movie clip without voice.
1. Press the Up button and the ( ) icon will display on the LCD monitor.
2. Press the shutter button and movie clip is recorded for as long as the available recording time without voice.
3. To stop the recording, press the shutter button again.

[MOVIE CLIP mode]

■ Pausing while recording a movie clip (Successive Recording)
This camera allows you to temporarily stop during unwanted scenes, while recording a movie clip. Using this function, you can record your favourite scenes into a movie clip without having to create multiple movie clips.

● Using Successive Recording
1. Press the shutter button and movie clips are recorded for as long as the available recording time. Movie clips will still be recorded if the shutter button is released.
2. Press the Pause button ( ) to pause recording. Press the Pause button ( ) again to resume the recording.
3. If you wish to stop recording, press the shutter button again.

[Successive recording of a movie clip]

Starting the recording mode

■ Night / Portrait / Children mode

Rotate the mode dial to select a desired mode.

- Night mode : Use this for still images at night or in other dark conditions
- Portrait mode : To take a picture of a person
- Children mode : To take a still picture of moving children

[Night mode]

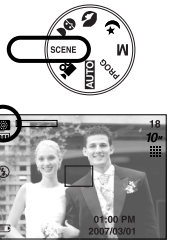
[Portrait mode]

[Children mode]

■ How to use the SCENE mode (**SCENE**)

Use the menu to easily configure optimal settings for a variety of shooting situations. These include LANDSCAPE, CLOSE UP, SUNSET, DAWN, BACKLIGHT, FIREWORKS and BEACH & SNOW scenes.

1. Select the SCENE mode by rotating the mode dial.
2. Press the menu button and select a desired scene menu.



[SCENE mode]

※ The scene modes are listed below.

[Landscape] (▲) : To take pictures of distant scenery.
[Close up] (❀) : Close-up shooting for small objects such as plants and insects.
[Sunset] (☁) : For taking pictures of sunsets.
[Dawn] (☀) : Daybreak scenes..
[Backlight] (☀) : Portrait without shadows caused by backlight.
[Flirework] (✺) : Firework scenes.
[Beach&Snow] (≈) : For ocean, lake, beach and snowscape scenes.

Starting the recording mode

■ How to use the VOICE RECORDING mode ( )

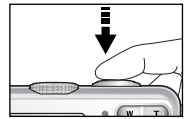
1. In any mode with the exception of Movie clip mode, select the VOICE RECORDING mode by pressing the Voice recording button twice.
2. Press the shutter button to record a voice.
   - Press the shutter button once and voice is recorded for as long as the available recording time (Max : 1 hour) allows. The recording time will be displayed on the LCD monitor. Voice will still be recorded if the shutter button is released.
   - If you wish to stop recording, press the shutter button again.
   - File type : *.wav

   * A distance of 40cm between you and the camera (microphone) is the best distance to record sound.

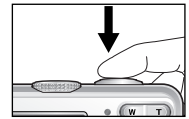
[VOICE RECORDING mode]

Things to Watch Out for When Taking Pictures

■ Pressing the shutter button down half way.
Lightly press the shutter button to confirm focus and flash battery charge.
Press the shutter button all way down to take the picture.



[Lightly press the shutter button]



[Press the shutter button]

■ The available recording time may vary depending on shooting conditions and camera settings.
■ When the Flash Off or Slow synchro mode is selected in a low lighting condition, the camera shake warning indicator ( ) may appear on the LCD monitor. In this case, use a tripod, support the camera on a solid surface or change to flash shot mode.
■ Shooting against the light :
Please do not take pictures to the sunlight direction. Taking a picture against the sun may make the picture dark. To take a picture against the sun, please use the [Backlight] in the scene shooting mode (see page 16), fill-in flash (see page 23), spot metering (see page 34), or exposure compensation (see page 31).
■ Avoid obstructing the lens or the flash when you capture an image.
■ Compose the image by using the LCD monitor.
■ Under certain conditions the auto focus system may not perform as expected.
- When photographing a subject that has little contrast.
- If the subject is highly reflective or shiny.
- If the subject is moving at high speed.
- When there is strong reflected light, or when the background is very bright.
- When the subject matter has only horizontal lines or the subject is very narrow (such as a stick or flagpole).
- When the surroundings are dark.

Using the camera buttons to set the camera

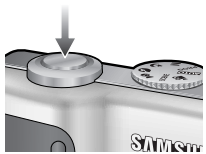
■ The recording mode function can be set up by using the camera buttons.

POWER button

- Used for turning the camera's power on / off.
- If there is no operation during the specified time, the camera's power will be turned off automatically to save battery life.
  Refer to page 56 for more information about the auto power off function.

Shutter button

- Used for taking an image or recording voice in the RECORDING mode.
- In MOVIE CLIP mode :
  Pressing the shutter button down fully starts the process for recording a movie clip. Press the shutter button once and the movie clip is recorded for as long as the available recording time in the memory allows. If you wish to stop recording, press the shutter button again.
- In STILL IMAGE mode
  Pressing the shutter button down halfway activates the autofocus and checks the condition of the flash. Pressing the shutter button down fully takes and stores the image. If you select voice memo recording, the recording will start after the camera has finished storing the image data.



ZOOM W / T button

- If the menu is not displayed, this button works as the OPTICAL ZOOM or DIGITAL ZOOM button.

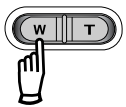
- This camera has a 3X optical zoom and a 5X digital zoom function.
  Using both will offer a total zoom ratio of 15X.
- TELE Zoom
  Optical zoom TELE : Pressing the ZOOM T button. This will zoom into the subject i.e. the subject will appear nearer.
  Digital zoom TELE : When the maximum (3X) optical zoom is selected, pressing the ZOOM T button activates the digital zoom software. Releasing ZOOM T button stops the digital zooming at the required setting. Once the maximum digital zoom (5X) is achieved, pressing the ZOOM T button will have no effect.

[WIDE zoom] [TELE zoom] [Digital zoom 5X]

ZOOM W / T button

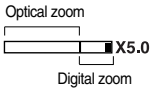
- WIDE Zoom

Optical zoom WIDE : Pressing the ZOOM W button. This will zoom out from the subject i.e. the subject will appear farther away. Pressing the ZOOM W button continuously will set the camera to its minimum zoom setting i.e. the subject appears at its farthest from the camera.



[TELE zoom] [Optical zoom 2X] [WIDE zoom]

Digital zoom WIDE : When the digital zoom is in operation, pressing the ZOOM W button will reduce the digital zooming in steps. Releasing ZOOM W button stops digital zooming. Pressing the ZOOM W button will reduce the digital zoom and then it will continue to reduce the optical zoom until the minimum setting is reached.



[Digital zoom 5X] [TELE zoom] [WIDE zoom]

INFORMATION

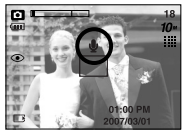
- Images taken using the digital zoom may take a little longer for the camera to process. Allow time for this to take place.
- The digital zoom cannot be used in movie clip shots.
- You may notice a decrease in image quality when using the digital zoom.
- To view a clearer digital zoom image, press the shutter button halfway at the maximum (3X) optical zoom position and press the zoom T button again.
- The digital zoom can't be activated in the Nightscene mode, Children mode and two scene modes (Close up, Fireworks).
- Take care not to touch the lens to avoid taking an unclear image and possibly causing camera malfunction. If the image is dim, turn the camera power off and on again to modify the lens position.
- Take care not to press the lens as this may cause a camera malfunction.
- When the camera is turned on, take care not to touch the camera's moving lens parts as this may cause the resulting image to be dim and unclear.

Voice recording( ) / Voice memo( ) / UP button

■ While the menu is showing, press the UP button to move up the sub menu. When the menu is not displayed on the LCD monitor, the UP button operates as the voice recording or voice memo ( ) button. You can add your voice-over to a stored still image. Refer to page 17 for more information about the voice recording.

● Recording a voice memo

1. Rotate the MODE DIAL to select a RECORDING mode with the exception of MOVIE CLIP mode.
2. Press the VOICE MEMO ( ) button. If the voice memo indicator is displayed on the LCD monitor, the setting is completed.



[Preparing for Voice Memo]

[Recording Voice Memo]

3. Press the shutter button and take a picture. The picture is stored on the memory card.
4. Voice memo will be recorded for ten seconds from the moment the picture is stored. In the middle of the sound recording, pressing the shutter button will stop the voice memo.

INFORMATION

● A distance of 40cm between you and the camera (microphone) is the best distance to record sound.

Macro( ) / Down button

■ While the menu is showing, press the DOWN button to move from the main menu to a sub menu, or to move down the sub menu. When the menu is not showing, you can use the MACRO / DOWN button to take macro pictures. The distance ranges are shown below. Press the Macro button until the desired macro mode indicator displays on the LCD monitor.

[Auto focus - No icon]

[Macro ( )]

[Auto macro ( )]

■ Types of focus modes and focus ranges (W: Wide, T: Tele) (Unit : cm)

Mode	Auto ( )		Program ( )	
Focus Type	Auto macro ( )	Normal	Macro ( )	Normal
Focus range	W : 4~Infinity T : 50~Infinity	W : 80~Infinity T : 80~Infinity	W : 4~80 T : 50~80	W : 80~Infinity T : 80~Infinity

INFORMATION

● When the macro mode is selected, it is possible that camera shake will occur. Take care not to shake the camera.
● When you take a picture within 30cm in the Macro mode, select the FLASH OFF mode.

Macro( ) / Down button

■ Available focusing method, by recording mode
(O: Selectable , X: Not selectable, ∞: Infinity focus range)

Mode							
Normal	O	O	O	O	O	O	O
Macro	X	O	O	X	X	X	O
Auto macro	O	X	X	X	X	X	X
Mode	SCENE						
Normal	∞	X	∞	∞	O	∞	O
Macro	X	O	X	X	X	X	X
Auto macro	X	X	X	X	X	X	X

Focus lock

■ To focus on a subject not positioned in the centre of the picture, use the focus lock function.

● Using the Focus Lock
1. Ensure the subject is in the centre of the autofocus frame.
2. Press the SHUTTER button halfway. When the green auto focus frame lights up, it means the camera is focused on the subject. Be careful not to press the SHUTTER button all the way down to avoid taking an unwanted picture.
3. With the SHUTTER button still pressed down only halfway, move the camera to recompose your picture as desired, and then press the SHUTTER button completely to take the picture. If you release your finger from the SHUTTER button, the focus lock function will be cancelled.

1. The image to be captured.

2. Press the SHUTTER button halfway and focus on the subject.

3. Recompose the picture and fully press the SHUTTER button.

Flash (ϟ) / Left button

■ When the menu is displayed on the LCD monitor, pressing the LEFT button makes the cursor shift to the left tab.

■ When the menu is not displayed on the LCD monitor, the LEFT button operates as the FLASH (ϟ) button.

[Selecting the Auto flash]

● Selecting the flash mode

1. Rotate the MODE DIAL to select a RECORDING mode with the exception of MOVIE CLIP mode.
2. Press the Flash button until the desired flash mode indicator displays on the LCD monitor.
3. A flash mode indicator will be displayed on the LCD monitor. Use the correct flash to suit the environment.

● Flash range (Unit : m)

ISO	Normal		Macro		Auto macro	
	WIDE	TELE	WIDE	TELE	WIDE	TELE
AUTO	0.8 ~ 4.8	0.8 ~ 4.3	0.4 ~ 0.8	0.5 ~ 0.8	0.4 ~ 4.8	0.5 ~ 4.3

INFORMATION

- If you press the shutter button after selecting the Auto, Fill-in, Slow sychro flash, the first flash fires to check the shooting condition (Flash range and Power ratio of flash). Do not move until the second flash fires.
- Using the flash frequently will reduce the life of the battery.
- Under normal operating conditions the charging time for the flash is normally within 5 seconds. If the battery is weak, the charging time will be longer.
- During the continuous shot, AEB and movie clip mode, the flash function will not operate.
- Take photographs within the flash range.
- The image quality is not guaranteed if the subject is too close or highly reflective.
- When taking an image in a poorly lit condtion with the flash, there may be a white speck in the captured image. The speck is caused by the reflecting of the flash light from the floating matters. It is not camera malfuction.

Flash ( ) / Left button

● Flash mode indicator

Menu tab	Flash mode	Description
	Auto flash	If the subject or background is dark, the camera flash will operate automatically.
	Auto & Red eye reduction	If a subject or background is dark, the camera flash will work automatically and will reduce the red-eye effect by using the red-eye reduction function.
	Fill in flash	The flash fires regardless of available light. The intensity of the flash will be controlled, according to the prevailing conditions. The brighter the background or subject is, the less intense the flash will be.
	Slow synchro	The flash will operate in conjunction with a slow shutter speed in order to obtain the correct exposure. When you take an image in a condition with poor light, the camera shake warning indicator ( ) will display on the LCD monitor. We recommend using a tripod for this function.
	Flash off	The flash does not fire. Select this mode when capturing images in a place or situation where flash photography is prohibited. When you capture an image in a poorly lit condition, the camera shake warning indicator ( ) will display on the LCD monitor. We recommend using a tripod for this function.

● Available flash mode, by recording mode (O : Selectable, X : Not selectable)

	X	X	O	X	X	X	X	X	X	X	X	X	X	O
	X	O	O	X	X	O	O	X	X	X	X	X	X	X
	X	X	O	O	X	X	X	X	X	X	X	O	X	X
	X	X	O	X	O	X	X	X	X	X	X	X	X	X
	O	O	O	O	O	O	O	O	O	O	O	X	O	X

Self-timer ( ) / Right button

- When the menu is displayed on the LCD monitor, pressing the Right button makes the cursor shift to the right tab.
- When the menu is not displayed on the LCD monitor, the RIGHT button operates as the Self-timer( ) button. This function is used when the photographer would also like to be in the image.

Self-timer ( ) / Right button

[Selecting the 10 SEC self-timer]

- Selecting the self-timer
  1. Rotate the MODE DIAL to select a RECORDING mode with the exception of VOICE RECORDING mode.
  2. Press the SELF-TIMER button until the desired mode indicator displays on the LCD monitor. A 10 second, 2 second or double self-timer icon appears on the LCD monitor. In Movie Clip mode, only the 10-second self-timer will work.
     - 10SEC self-timer ( )
       : Pressing the shutter button will allow an interval of 10 seconds before the image is taken.
     - 2SEC self-timer ( )
       : Pressing the shutter button will allow an interval of 2 seconds before the image is taken.
     - Double self-timer ( )
       : A picture will be taken after about 10 seconds and 2 seconds later a second picture will be taken. When using the flash, the 2-second self-timer may be delayed for longer than 2 seconds depending on the flash charge time.
  3. When you press the SHUTTER button, the picture will be taken after the specified time has elapsed.

INFORMATION

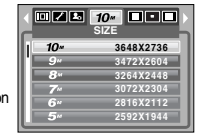
- If you operate the Self-timer and Play mode button during the self-timer operation, the self-timer function is cancelled.
- Use a tripod to prevent the camera from shaking.
- In Movie Clip mode, only the 10SEC self-timer will work.

MENU / OK button

■ MENU button
- When you press the MENU button, a menu related to each camera mode will be displayed on the LCD monitor. Pressing it again will return the LCD to the initial display.
- A menu option can be displayed when the following are selected : MOVIE CLIP and STILL IMAGE modes. There is no menu available when the VOICE RECORDING mode is selected.

[Menu off]

Pressing the MENU button



[Menu on]

■ OK button
- When the menu is displayed on the LCD monitor, this button is used for shifting the cursor to the sub menu or for confirming data.

E (Effect) button

- It is possible to add special effects to your images by using this button.
- Still image mode : You can select the colour, outfocus, composite and frame menus.
- Movie clip mode : You can select the colour and stabiliser menus.
- Available Effects, by recording mode (O : Selectable X : Not selectable)

	O	O	O	O	O	O	O	O	O
	X	X	O	O	O	O	O	O	O
	X	X	O	O	O	O	O	O	O
	X	X	O	O	O	O	O	O	O
	O	X	X	X	X	X	X	X	X

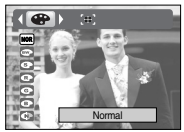
※ This button will not operate in the Voice recording mode and some scene modes (Night, Sunset, Dawn, Backlight, Firework).
If a special effect is selected, any previously selected special effects (preset focus frames; composite shooting; photo frame) are cancelled automatically.

- Even if the camera is turned off, the special effect setting will be preserved. To cancel the special effect, select the NOR sub menu in the Colour menu and select the OFF sub menu in the rest special effect menu.

Special Effect : Colour

- By using the camera's digital processor, it is possible to add special effects to your images
  1. Press the E button in any recording mode.
  2. Select the menu tab by pressing the Left / Right button.

[Still image mode]



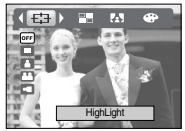
[Movie clip mode]

  3. Select a desired sub menu by pressing the Up / Down button and press the OK button.
     - NOR : No effect is added to the image
     - BW : Captured images will be stored in black and white.
     - S : Captured images will be stored in a sepia tone (a gradient of yellowish brown colours).
     - R : Captured images will be stored in a red tone.
     - G : Captured images will be stored in a green tone.
     - B : Captured images will be stored in a blue tone.
     - N : Save the image in negative mode.
  4. Press the shutter button to capture an image.

Special Effect : Preset focus frames

■ You can make the subject stand out from its surroundings. The subject will be sharp and in focus while making the rest out of focus.

1. Press the E button in any recording mode (except for MOVIE CLIP and AUTO mode).
2. Select the menu tab by pressing the Left / Right button.
3. Select a desired sub menu by pressing the Up / Down button and press the OK button.



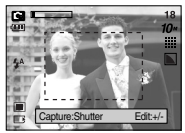
[Range 1]

[Range 2]

[Range 3]

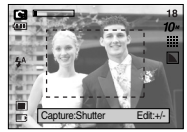
[Range 4]

4. The preset focus frame will appear.
   Press the shutter button to capture an image

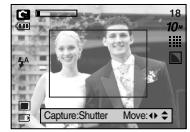


● Moving and changing the focus frame
You can change the focus frame after selecting a Range menu.

1. Point the camera towards the subject and compose the image by using the LCD monitor.
2. Press the + / - button.
3. The colour of focus frame turns white. Press the Up / Down / Left / Right button to move the focus frame position.
4. To select the focus frame position, press the + / - button again and you can take a picture.

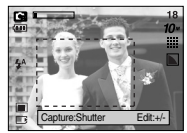


Pressing the + / - button

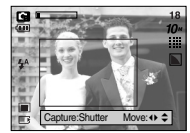


[The frame is activated]

Pressing the
Up / Down / Left /
Right button



Pressing the + / - button



[After changing the frame position]

Special Effect : Composite shooting

■ You can combine 2 ~ 4 different shots in a still image.

1. Press the E button in any recording mode (except for MOVIE CLIP and AUTO mode).
2. Select the menu by pressing the Left / Right button.
3. Select a desired sub menu by pressing the Up / Down button and press the OK button.

   - OFF : cancels the composite shooting
   - : 2 different shots are combined in a still image.
   - : 3 different shots are combined in a still image.
   - : 4 different shots are combined in a still image.
   - : 2 different panorama shots are combined in a still image.

4. The number of frames you selected in step 3 is displayed on the LCD monitor. Press the shutter button to start the composite shooting

※ Selecting 2 composite shooting

[Ready for taking] [First shot] [Second shot] [The final picture]

5. To save the composite shots, press the OK button after taking the last shot.

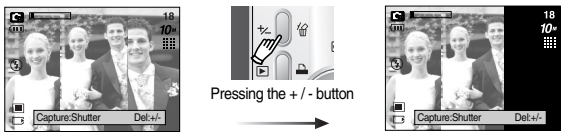
INFORMATION

- You can use the flash button, self-timer button, macro button, voice memo button and the Zoom W / T button during the composite shooting.
- If you press the Play mode button or press the Voice recording button twice during the composite shots, each camera working mode is executed. When the Menu or E button is pressed, a confirmation window will display. The images captured before will be deleted.
- After taking the last composite shooting, press the OK button. And then the voice memo will start.

● Changing a part of composite shot before taking the last shot

Before taking the last composite shot, you can change a part of composite shot.

1. During the composite shots, press the + / - button.
2. A previous image will be deleted and new frame will display. If there is an image taken before, press the + / - button again and a previous image will be deleted again.



[Before taking the 3rd shot] [Moving backward to the 2nd shot]

3. Press the shutter button to capture a new image.

Special Effect : Composite shooting

- Changing a part of composite shot after taking the last shot
  1. After taking the last shot , a cursor to select a frame will display. Press the Up / Down / Left / Right button to select the frame.
  2. Press the + / - button and an image will be deleted. Composite frame will be activated.
  3. Press the Shutter button. You can take another images again by using the Up / Down / Left / Right button and + / - button.
  4. Press the OK button again to save the captured image.

[After taking the 4th shot]

Pressing the Up button

[Moving backward to the 2nd shot]

Pressing the + / - button

[Deleting the 2nd shot]

Pressing the Shutter button.

[After taking the 2nd shot again]

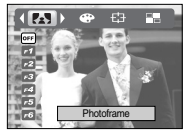
Pressing the OK button

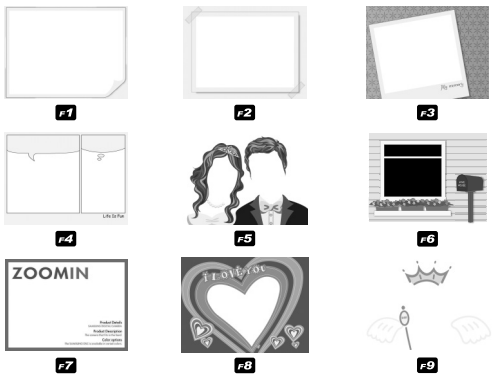
[The final picture]

Special Effect : Photo Frame

■ You can add 9 types of frame-like borders to a still image you want to capture.

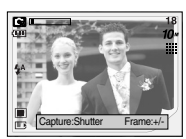
1. Press the E button in any recording mode (except for MOVIE CLIP and AUTO mode).
2. Select the menu by pressing the Left / Right button.
3. Select a desired sub menu by pressing the Up / Down button and press the OK button.
   - OFF : The photo frame will not be added.





4. The photo frame will appear.
   Press the shutter button to capture an image

※ Before taking a picture, you can change the frame by pressing the + / - button. Change the frame type by pressing the Up / Down / Left / Right button.



Movie Clip frame stabiliser

■ This function helps stabilise images captured during movie recording.

1. Press the E button in the Movie clip mode.
2. Press the Left / Right buttons to select the stabilizer menu tab.
3. Select a desired sub menu by pressing the UP/ DOWN button and press the OK button.
   - OFF : Movie clip frame stabiliser function becomes disabled.
   - ON : Prevents camera shake during movie recording. The recording frame range will become narrower than when you select the OFF menu. Pre-view frames may not display smoothly on the LCD monitor.

+ / - button

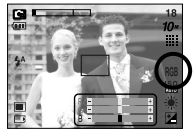
■ You can use the + / - button to adjust the values for the RGB, ISO, white balance and exposure compensation.

Main menu	Sub menu	Available camera mode
RGB	R (Red), G (Green), B (Blue)	
ISO	AUTO, 80, 100, 200, 400, 800, 1000	
WHITE BALANCE	AUTO, DAYLIGHT, CLOUDY, FLUORESCENT H, FLUORESCENT L, TUNGSTEN, CUSTOM.	
Exposure compensation	-2.0~0.0~+2.0 (0.5EV steps)	

+ / - button

■ RGB : Allows the user to adjust the R (Red), G (Green), and B (Blue) values of the images to be captured.

● Setting RGB Values



1. Press the + / - button, and then use the UP and DOWN buttons to select the RGB icon (RGB). The RGB menu bar will appear as shown.
2. Use the UP / DOWN / LEFT and RIGHT buttons to select the desired RGB value.
   - Up / Down Button : Navigates between R, G, and B icons.
   - Left / Right Button : Changes value of each icon.
3. When you press the + / - button again, the value you set will be saved and RGB setup mode will end.

※ When special effect (colour) from the icon other than NOR is selected, it will not be able to select the RGB.

+ / - button

■ ISO : You can select the ISO sensitivity when taking pictures.
The speed or specific light-sensitivity of a camera is rated by ISO numbers.

● Selecting an ISO Sensitivity

1. Press the + / - button, and then use the UP and DOWN buttons to select the ISO icon(ISO AUTO). The ISO menu bar will appear as shown.
2. Use the LEFT and RIGHT buttons to select the desired ISO sensitivity value.
   - AUTO : The camera's sensitivity is automatically changed by variables such as lighting value or subject brightness.
   - 80, 100, 200, 400, 800, 1000 :
     You can increase the shutter speed while the same amount of light is present, by increasing the ISO sensitivity. However, the image may be saturated in high luminance. The higher the ISO value, the higher the camera's sensitivity to light is and therefore the greater its capacity to take pictures in dark conditions. However, the noise level in the image will increase as the ISO value increases, making the image appear coarse.
3. When you press the + / - button again, the value you set will be saved and ISO setup mode will end.

■ White balance : The white balance control allows you to adjust the colours to appear more natural looking.

● Selecting a White Balance

1. Press the + / - button, and then use the UP and DOWN buttons to select the white balance icon (AWB). The white balance menu bar will appear as shown.
2. Use the LEFT and RIGHT buttons to set the white balance to the desired value. The value you set wil be displayed on the LCD monitor.
   AUTO AWB : The camera automatically selects the appropriate white balance settings, depending on the prevailing lighting conditions.
   DAYLIGHT : For taking images outside.
   CLOUDY : For taking images under a cloudy and overcast sky.
   Fluorescent H : For shooting under daylight fluorescent types of three-way fluorescent lighting.
   Fluorescent L : Shooting under white fluorescent lighting.
   TUNGSTEN : For shooting under tungsten (standard light bulb) lighting.
   CUSTOM : Allows the user to set the white balance according to the shooting condition.
   Different lighting conditions may cause a colour cast on your images.
3. Press the + / - button again. The value you set will be saved and White Balance setup mode will end.

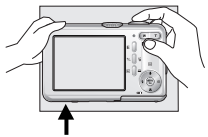
+ / - button

● Using the Custom White Balance

White balance settings may vary slightly depending on the shooting environment.

You can select the most appropriate white balance setting for a given shooting environment by setting up the custom white balance.

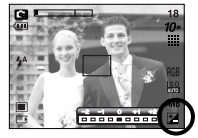
1. Select the CUSTOM (▁■▁) menu of the White Balance.
2. Place a sheet of white paper in front of the camera so that the LCD monitor shows only white, and then press the SHUTTER button.
3. Your custom white balance value is stored.
   - The custom white balance value will be applied, starting with the next picture you take.
   - The user configured white balance will be remain effective until it is overwritten.



[White paper]

■ Exposure compensation : This camera automatically adjusts the exposure according to the ambient lighting conditions.
You can also select the exposure value by using the + / - button.

● Compensating Exposure



1. Press the + / - button, and then use the UP and DOWN buttons to select the exposure compensation icon (±).
   The exposure compensation menu bar will appear as shown.
2. Use the LEFT and RIGHT buttons to set the desired exposure compensation factor.
3. Press the + / - button again. The value you set will be saved and the Exposure Compensation setup mode will close.
   If you change the exposure value, the exposure indicator (±) will be displayed on the bottom of the LCD monitor.

※ A negative exposure compensation value reduces the exposure.
Note that a positive exposure compensation value increases the exposure and the LCD monitor will appear white or you may not get good pictures.

Using the LCD monitor to set the camera settings

■ You can use the menu on the LCD monitor to set up recording functions. In any mode with the exception of VOICE RECORDING mode, pressing the MENU button displays the menu on the LCD monitor.

※ The menu will not be displayed on the LCD monitor in the following circumstances:
- When another button is being operated.
- While image data is being processed.
- When there is no battery capacity.

■ The following functions are available, depending on the mode you have selected. The items indicated by ▭ are default settings.

Menu tab	Main menu	Sub menu		Camera working mode	Page
10M	SIZE (Still image)	3648X2736	3472x2604		p.33
		3264X2448	3072X2304		
		2816X2112	2592X1944		
		2272X1704	2048X1536		
		1600X1200	1024X768		
		640X480	-		
640	SIZE (Movie clip)	640X480	320X240		p.33
		160X128	-		
	QUALITY	Super Fine	Fine		p.33
		Normal	-		
30	FRAME RATE	30 FPS	15 FPS		p.33
	METERING	Multi	Spot	M	p.34
	SHOOTING	Single	Continuous	M	p.34
		AEB	-		
	SHARPNESS	Soft	Normal	M	p.35
		Vivid	-		

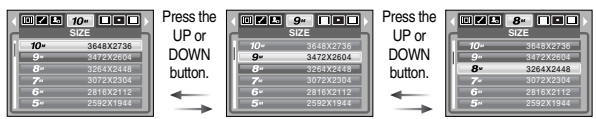
Menu tab	Main menu	Sub menu		Camera working mode	Page
	OSD INFORMATION	Full	Basic		p.35
		LCD Save	-		
	MODE	Landscape	Close up		p.16
		Sunset	Dawn		
		Backlight	Firework		
		Beach&Snow	-		

※ Menus are subject to change without prior notice.

How to use the menu

1. Turn on the camera and press the MENU button. A menu for each camera mode appears. However, there is no menu for Voice Recording mode ( ).
2. Use the LEFT and RIGHT buttons to navigate through the menus.

3. Use the UP and DOWN buttons to select a sub menu.

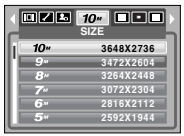


4. Select a sub menu, and then the value you set will be saved. Press the MENU button and the menu will disappear.

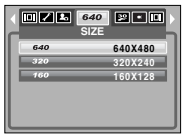
Size

■ You can select the image size appropriate for your application.

Mode	Still image mode										
Icon	10M	9M	8M	7M	6M	5M	4M	3M	2M	1M	VGA
Size	3648X 2736	3472X 2604	3264X 2448	3072X 2304	2816X 2112	2592X 1944	2272X 1704	2048X 1536	1600X 1200	1024X 768	640X 480
Mode	Movie clip mode										
Icon	640				320			160			
Size	640X480				320X240			160X128			



[Still image mode]



[MOVIE CLIP mode]

INFORMATION

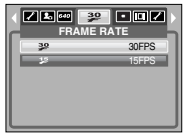
- The higher the resolution, the lower the number of shots available because high resolution images require more memory.

Quality / Frame rate

■ You can select the compression ratio appropriate for your application of the captured images.
The higher the compression ratio, the lower the picture quality.

Mode	STILL IMAGE mode			MOVIE CLIP mode	
Icon				30	15
Sub menu	Super Fine	Fine	Normal	30FPS	15FPS
File Format	jpeg	jpeg	jpeg	avi	avi

[STILL IMAGE mode]



[MOVIE CLIP mode]

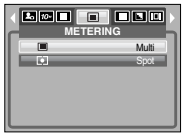
INFORMATION

- This file format complies with the DCF (Design rule for Camera File system).
- JPEG (Joint Photographic Experts Group) : JPEG is the image compression standard developed by the Joint Photographic Experts Group. This type of compression is most commonly used for compressing photos and graphics because it can compress the files efficiently without damaging the data.

Metering

■ If you cannot obtain suitable exposure conditions, you can change the metering method to take brighter pictures.

- Multi : Exposure will be calculated based on an average of the available light in the image area. However, the calculation will be biased towards the centre of the image area. This is suitable for general use.
- Spot : Only the rectangular area in the centre of the LCD monitor will be metered for light. This is suitable when the subject in the centre is exposed correctly, regardless of the back lighting.



[PROGRAM mode]

※ If the subject is not the centre of the focus area, do not use the spot metering as this may result in an exposure error. In this circumstance, it is better to use exposure compensation.

Continuous shot

■ You can select continuous shot, and AEB (Auto Exposure Bracketing).

- Single : Take one picture only
- Continuous : Images will be taken continuously until the shutter button is released. The shooting capacity depends on the memory.
- AEB : Take three pictures in a series in different exposures: standard exposure(0.0EV), short exposure (-0.5EV) and over exposure (+0.5EV). Use the mode if it is hard to decide exposure of the object.

[PROGRAM mode]

※ High resolution and picture quality increases file saving time, which increases stand-by time.

※ If the [Continuous] or [AEB] sub menu is selected, the flash will be off automatically.

※ If less than 3 pictures are available in the memory, the AEB shooting is not available.

※ It is best to use a tripod for the AEB shooting as the time to save each image file is longer and the blurring caused by camera shake may occur.

Sharpness

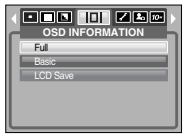
■ You can adjust the sharpness of the picture you want to take. You cannot check the sharpness effect on the LCD monitor before you take a picture, because this function is applied only when the captured image is stored on the memory.

[PROGRAM mode]

Sub menu	Icon	Description
Soft		The edges of the image are softened. This effect is suitable for editing images on your PC.
Normal		The edges of the image are sharp. This is suitable for printing.
Vivid		The edges of the image are emphasized. The edges will appear sharp, but noise may occur in the recorded image.

OSD (On Screen Display) information

■ In any mode with the exception of VOICE RECORDING mode, you can check the recording status in the LCD monitor.



■ Idle mode : If you select the [LCD Save] and the camera isn't operated during the specified time(about 30 SEC.), the camera power will be idle (LCD monitor : OFF, Camera status lamp : Blinking) automatically.

- To use the camera again, press any of the camera buttons except the power button.
- If there is no operation during the specified time, the camera power will be turned off automatically to save battery life. Refer to page 56 for more information about the auto power off function.

[Full information mode]

[Basic information mode]

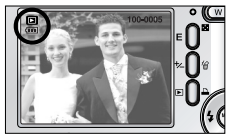
Starting play mode

- If the memory card is inserted in the camera, all the camera functions apply only to the memory card.
- If the memory card is not inserted in the camera, all the camera functions apply only to the internal memory.
- If you have turned on the camera by pressing the POWER button, you can press the PLAY MODE button once to switch to Play mode and press it again to switch to Recording mode.
- You can turn the power on with the play mode button. The camera is turned on in play mode. Press the play mode button again and the camera will be turned off.
- You can set up the PLAY mode function by using the camera buttons and LCD monitor.

● Playing back a still image

1. Select the PLAY mode by pressing the play mode button (▶).

2. The last image stored on the memory is displayed on the LCD monitor.



3. Select an image that you want to play back by pressing the LEFT / RIGHT button.

※ Press and hold the Left or Right button to fast forward the images played.

INFORMATION

- Manner mode : Pressing the play mode button for more than 3 seconds changes the buzzer and start-up sound setting to OFF, even though you may have set these to ON.
- Lightly press the shutter button in Play mode to switch to the currently set shooting mode.

● Playing back a movie clip

Steps from 1-2 are the same as those to play back a still image.

3. Select the recorded movie clip and press the Play & Pause button (▶/II) to play back.
   - To pause a movie clip file while playing it back, press the play & pause button again.
   - Pressing the play & pause button again will cause the movie clip file restart.
   - To rewind the movie clip while it is playing, press the LEFT button. To fast forward the movie clip, press the RIGHT button.
   - To stop playback of the movie clip, press the play & pause button, and then press the LEFT or RIGHT button.

Starting play mode

■ Movie clip capture function : capture still images from the movie clip.

● How to capture the movie clip

Steps 1-3 are the same as those for playing back a movie clip.

4. Press the Play / Pause button while playing the movie clip. Then press the E button.
5. The paused movie clip is saved in a new file name.

※ The captured movie clip file has same size as the original movie clip (640X480, 320X240, 160X128).

[Paused]

[Pressing the E button]

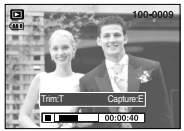
■ On camera movie trimming : You can extract desired frames of movie clip during the movie clip play back.

● If the running time is under 10 seconds, the movie clip can't be trimmed.

1. Press the Pause button at the point of the movie clip that you want to start extracting.
2. Press the T button. (The start point doesn't display on the status bar, but the start point will be marked.)
3. Press the Play & Pause button and the extracted range will be displayed on the status bar.
4. Press the Play & Pause button once more at the point where you wish the extracted file to stop.
5. Press the T button and a confirmation window will display.
6. Select a desired sub menu by pressing the Left/ Right button and press the OK button.

   [Yes] : The extracted frames are saved as a new file name.

   [No] : The movie trimming will cancel.



INFORMATION

- If you want to extract the movie clip at the beginning of the frame, press the Zoom T button before starting the movie clip.
- If the time line bar passes by the start point by pressing the REW (Left) button, the first frame of the movie clip will display.
- If you don't specify the ending point of the movie clip, the trimming confirmation window will display at the point of the last frame.

Starting play mode

● Playing back a recorded voice

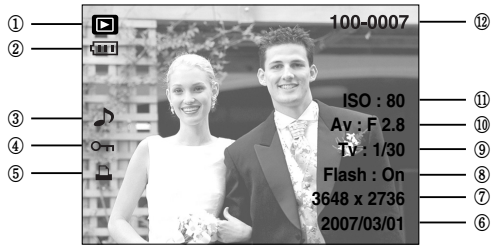
Steps from 1-2 are the same as those to play back a still image.

3. Select the recorded voice file and press the Play & Pause button (▶/II) to play back a recorded voice file.

- To pause a recorded voice file, while playing it back, press the play & pause button again.
- To resume playback of the voice file, press the play & pause button.
- To rewind the voice file while it is playing, press the LEFT button.
  To fast forward the voice file, press the RIGHT button.
- To stop playback of the voice file, press the play & pause button, and then press the LEFT or RIGHT button.

LCD monitor Indicator

■ The LCD monitor displays shooting information about the displayed image.



No.	Description	Icon	Page
1	Play mode icon		-
2	Battery		p.9
3	Voice Memo		p.20
4	Protect		p.46
5	DPOF		p.48
6	Recording date	2007/03/01	-
7	Image size	3648 x 2736 ~ 256 x 192	p.33
8	Flash	On / Off	p.22
9	Shutter speed	8 ~ 1/1,500	p.14
10	Aperture Value	F2.8 ~ F13.1	p.14
11	ISO	80 ~ 1000	p.30
12	Folder name & File name	100-0007	p.55

Using the camera buttons to set the camera

■ In Play mode, you can use the buttons on the camera to conveniently set up the Play mode functions.

Thumbnail (▦) / Enlargement (🔍) button

● You can view multiple pictures, enlarge a selected picture, and crop and save a selected area of an image.

● Thumbnail display

1. While an image is displayed on full screen, press the thumbnail button.
2. The thumbnail display will highlight the image that had been showing at the time the thumbnail mode was selected.
3. Press the 5 function button to move to a desired image.
4. To view an image separately, press the enlargement button.

[Normal display mode]

Pressing the thumbnail button (▦)

Pressing the enlargement button (🔍)

Highlighted image

[Thumbnail display mode]

Thumbnail(▦) / Enlargement (🔍) button

● Image enlargement

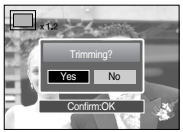
1. Select an image that you want to enlarge and press the enlargement button.
2. Different parts of the image can be viewed by pressing the 5 function button.
3. Pressing the thumbnail button will zoom back to the original full sized image.
   - You can tell whether the image displayed is an enlarged view by checking the image enlargement indicator shown at the top left of the LCD monitor. (If the image is not an enlarged view, the indicator will not be displayed.) You can also check the area of enlargement.
   - Movie clips and WAV files can't be enlarged.
   - If an image is enlarged, a loss of quality may occur.

Thumbnail( ) / Enlargement ( ) button

● The maximum enlargement rate in proportion to the image size.

Image size	10M	9M	8M	7M	6M	5M	4M	3M	2M	1M	VGA
Maximum enlargement rate	X14.3	X13.6	X12.8	X12.0	X11.0	X10.1	X8.9	X8.0	X6.3	X4.0	X2.5

● Trimming : You can extract part of the image that you want and save it separately.



1. Select an image that you want to enlarge and press the enlargement button. Press the Menu button and a message will be displayed.
2. Select a desired sub menu by pressing the Left / Right button and press the OK button.
   [Yes] : The trimmed image will save as a new file name, and display on the LCD monitor.
   [No] : The trimming menu will disappear.

※ If there is little memory space to save the trimmed image, the image can't be trimmed.

※ To delete the enlarged image during the trimming function, press the delete button.

Voice ( ) memo / Up button

■ When the menu is displayed on the LCD monitor, pressing the UP button makes the menu cursor move up.

■ When the menu is not displayed on the LCD monitor, the UP button operates as the voice memo button. You can add your voice to a stored still image.

● Adding a Voice Memo to a Still Image

1. Press the LEFT / RIGHT button to select an image that you wish to add sound to.
2. Press the voice memo button ( ) and the voice memo indicator will display. The camera is now ready to record a voice memo.

3. Press the shutter button to start recording and voice will be recorded to the still image for 10 seconds.
   While the voice is recording, the recording status window will be displayed as shown alongside.

4. The recording can be stopped by pressing the shutter button again.

5. The ( ) icon will be displayed on the LCD monitor after voice memo recording has finished.

- Voice memos can't be recorded onto movie clip and voice recording files.
- A distance of 40cm between you and the camera (microphone) is the best distance to record sound.
- The voice memo will be saved in ＊.wav format, but has the same file name as the still image to which it corresponds.
- If you add a new voice memo to the still image that already has a voice memo, the existing voice memo will be erased.

Play & Pause (▶/II) / Down button

■ In Play mode, the play & pause/ down button works as follows:

- If the menu is displayed
  Press the DOWN button to move from the main menu to a sub menu, or to move down the sub menu cursor.
- If a still image with a voice memo, a voice file, or a movie clip is playing
  In Stop mode : Plays a still image with a voice memo, a voice file, or a movie clip.
  During playback : Temporarily stops playback.
  In Pause mode : Resumes playback

[Voice recording is stopped]

[Voice recording is playing]

[Voice recording is paused]

E (Effect) button

■ It is possible to add special effects to your images by using this button.

1. Select a still image or movie clip and press the E button.
2. Select a desired sub menu and press the OK button.

- : Captured images will be stored in black and white.
- : Captured images will be stored in a sepia tone (a gradient of yellowish brown colours).
- : Captured images will be stored in a red tone.
- : Captured images will be stored in a green tone.
- : Captured images will be stored in a blue tone.
- : Save the image in negative mode.

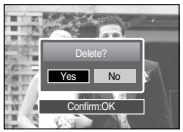
※ The changed image is saved in a new file name.

Delete ( ) button

■ This deletes images stored on the memory.

● Deleting Images in Play Mode

1. Select an image that you want to delete by pressing the LEFT / RIGHT button and press the DELETE( ) button.
2. A message will display as shown alongside on the LCD monitor.
3. Select the sub menu values by pressing the LEFT / RIGHT button and then press the OK button.
   If [Yes] is selected : deletes the selected images.
   If [No] is selected : cancels "Delete Image".



● Deleting Images in Thumbnail Display Mode

1. Use the UP, DOWN, LEFT, and RIGHT buttons to select the image you want to delete, and then press the DELETE ( ) button.
2. A message will display on the LCD monitor as shown below.
3. Select the sub menu values by pressing the LEFT / RIGHT button and then press the OK button.
   If [Yes] is selected : deletes the selected images.
   If [No] is selected : cancels "Delete Image".

INFORMATION

● Before deleting images from the camera, you should protect or download images to your computer that you wish to keep.

Printer button

■ If you select [Computer] sub menu in the [USB] setup menu, [Connecting Computer] message will display when you connect the camera to your printer and the connection will not be established. In this case, press the Printer button. [Connecting Printer] message will display and the Easy printing mode will be selected.

* In some instances the camera may not connect to the printer, this will depend on the manufacturer of the printer.

- After the connection, the Easy printing menu will display on the LCD monitor.
  To display the PictBridge menu, press the Menu button. For more information about the PictBridge menu, refer to page 51.

Left / Right / Menu / OK button

■ LEFT / RIGHT / MENU / OK buttons activate the following.

- LEFT button : While the menu is showing, press the LEFT button to select the menu tab to the left of the cursor. While the menu is not showing, press the LEFT button to select the previous image.
- RIGHT button : While the menu is showing, press the RIGHT button to select the menu tab to the right of the cursor, or to move to a secondary menu. While the menu is not showing, press the RIGHT button to select the next image.
- MENU button : When you press the MENU button, the play mode menu will be displayed on the LCD monitor. Pressing it again will return the LCD to the initial display.
- OK button : When the menu is displayed on the LCD monitor, the OK button is used for confirming data that is changed by using the 5 function button.

Setting up the play back function using the LCD monitor

■ PLAY mode functions can be changed by using the LCD monitor. In the PLAY mode, pressing the MENU button displays the menu on the LCD monitor. The menus you can set up in Play mode are as follows. To capture an image after setting up the play menu, press the PLAY mode button or shutter button.

Menu tab	Main menu	Sub menu	Secondary menu	Page
	SLIDE	Show	Play / Repeat Play	p.45~46
		Interval	1, 3, 5, 10 sec	
		Effect	OFF	
			MIX	
	PROTECT	Select	Unlock / Lock	p.46
		All Pics		
	DELETE	Select	-	p.47
		All Pics	-	
	RESIZE	3472 X 2604	-	p.47
		3264 X 2448	-	
		3072 X 2304	-	
		2816 X 2112	-	
		2592 X 1944	-	
		2272 X 1704	-	
		2048 X 1536	-	
		1600 X 1200	-	
		1024 X 768	-	
		640 X 480	-	
		User Image 1, 2	-	

Setting up the play back function using the LCD monitor

Menu tab	Main menu	Sub menu	Secondary menu	Page
	ROTATE	Right 90°	-	p.48
		Left 90°	-	
		180°	-	
		Horizontal	-	
		Vertical	-	
	DPOF	Standard	Select / All Pics / Cancel	p.48
		Index	No / Yes	
		Size	Select / All Pics / Cancel	
	COPY TO CARD	No	-	p.50
		Yes	-	
	OSD INFORMATION	Full	-	p.51
		Basic	-	
		OSD Off	-	

■ This menu is available while the camera is connected to a PictBridge supporting printer (direct connection to the camera, sold separately) with a USB cable.

Menu tab	Main menu	Sub menu	Secondary menu	Page
S/I	IMAGES	One Pic	-	p.52
		All Pics	-	
	AUTO SET	No	-	p.52
		Yes	-	
	CUSTOM SET	Size	Auto	p.53
			Postcard	
			Card	
			4X6	
			L	
			2L	
			Letter	
			A4	
			A3	
		Layout	Auto	
			Full	
			1	
			2	
			4	
			8	
			9	
			16	
			Index	

Setting up the play back function using the LCD monitor

Menu tab	Main menu	Sub menu	Secondary menu	Page
	CUSTOM SET	Type	Auto	p.53
			Plain	
			Photo	
			Fastphoto	
		Quality	Auto	
			Draft	
			Normal	
			Fine	
		Date	Auto	
			Off	
			On	
		File name	Auto	
			Off	
			On	
	PRINT	Standard	-	p.53
		Index	-	
	DPOF PRINT	No	-	p.54
		Yes	-	
	RESET	No	-	p.54
		Yes	-	

※ Menus are subject to change without prior notice.

Starting the slide show

■ Images can be displayed continuously at pre-set intervals.
You can view the slide show by connecting the camera to an external monitor.
1. Press the play mode button and press the menu button.
2. Press the LEFT / RIGHT button and select the [SLIDE] menu tab.

● Start the slide show : The slide show can start only in the [Show] menu.

1. Use the Up / Down buttons to select the [Show] menu and press the Right button.
2. Select a desired sub menu by pressing the Up / Down button.
   [Play] : The slide show is closed after one cycle.
   [Repeat Play] : The slide show is repeated until cancelled.
3. Press the OK button and the slideshow will be started.

● Setting play interval: Set the slide show play interval.

1. Select the [Interval] sub menu by pressing the UP / DOWN button and press the RIGHT button.
2. Use the Up / Down buttons to select the desired interval.
3. Press the OK button to save the configuration.

INFORMATION

- The loading time depends on the image size and quality.
- While the slide show is playing, only the first frame of a MOVIE file is displayed.
- While the slide show is playing, the voice recording file will not display.

Starting the slide show

● Configure slide show effects : Unique screen effects can be used for the slide show.

1. Select the [Effect] sub menu by pressing the UP / DOWN button and press the RIGHT button.
2. Use the Up / Down button to select the type of effect.
   - OFF : Normal display.
   - : Image is displayed slowly.
   - : Image is displayed slowly from the centre outwards.
   - : Image moves from the top left.
   - : The image slides diagonally from top left to bottom right.
   - MIX : The image slides irregularly.
3. Press the OK button to confirm the setting.

Protecting images

■ This is used to protect specific shots from being accidentally erased (Lock). It also unprotects images that have been previously protected (Unlock).

● Protecting Images

1. Press the play mode button and press the menu button.
2. Press the LEFT / RIGHT button and select the [PROTECT] menu tab.
3. Select a desired sub menu by pressing the UP / DOWN button and press the OK button.

[Select] : Selection window for an image to be protected/released is displayed.
- Up / Down / Left / Right : Select an image
- Zoom W / T Button : Protect / release the image
- OK button : Your changes will be saved and the menu will disappear.

[All Pics] : Protect / release all saved images
- Zoom W / T Button : Protect / release the images
- OK button : Your changes will be saved and the menu will disappear.

- If you protect an image, the protect icon will be displayed on the LCD monitor. (An unprotected image has no indicator)
- An image in LOCK mode will be protected from the delete function or [Delete] functions, but will NOT be protected from the [Format] function.

Deleting images

■ Of all the files stored in the memory card, the unprotected files in the DCIM subfolder will be deleted. Remember that this will permanently delete unprotected images. Important shots should be stored on a computer before deletion takes place. The startup image is stored in the camera's internal memory (i.e., not on the memory card) and it will not be deleted even if you delete all files on the memory card.

● Deleting images

1. Press the play mode button and press the menu button.
2. Press the LEFT / RIGHT button and select the [Delete] menu tab.
3. Select a desired sub menu by pressing the UP / DOWN button and press the OK button.

[Select] : Selection window for an image to delete is displayed.
- Up / Down / Left / Right : Select an image
- Zoom T Button : Select the image for deletion. (✓ mark)
- OK Button : Press the OK button to display the confirmation message. Select the [Yes] menu and press the OK button to delete ✓ marked images.

[All Pics] : Displays confirmation window. Select the [Yes] menu and press the OK button to delete all unprotected images. If there aren't protected images, all the images are deleted and a [No Image!] message will display.

4. After deletion, the screen will be changed to the play mode screen.

Resize

■ Change the resolution (size) of pictures taken. Select the [User Image] to save an image to be the start-up image. The resized image will have a new file name.

1. Press the play mode button and press the menu button.
2. Press the LEFT / RIGHT button and select the [RESIZE] menu tab.
3. Select a desired sub menu by pressing the UP / DOWN button and press the OK button.

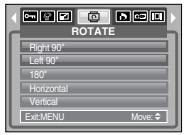
INFORMATION

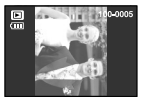
- The image only can be resized as smaller size than the displayed one.
- A large sized image can be resized to a smaller sized image, but not vice versa.
- Only JPEG images can be resized. Movie clip (AVI), Voice recording (WAV) files can't be resized.
- You can change the resolution of only those files compressed in the JPEG 4:2:2 format.
- The resized image will have a new file name. The [User Image] image is stored not on the memory card but on the internal memory.
- Only two [User Image] images can be saved.
- If the memory capacity is insufficient to store the resized image, a [Memory Full!] message will display on the LCD monitor and the resized image will not be stored.

Rotating an image

■ You can rotate the stored images by various degrees. Once the playback of the rotated picture is finished, it will switch back to the original state.

1. Press the play mode button and press the menu button.
2. Press the LEFT / RIGHT button and select the [ROTATE] menu tab.
3. Select a desired sub menu by pressing the UP / DOWN button.





[Right 90˚] :
Rotate picture in a clock-wise direction

[Left 90˚] :
Rotate picture in a counter-clock-wise direction

[180˚] :
Rotate picture 180 degrees

[Horizontal] :
Rotate picture horizontally

[Vertical] :
Rotate picture vertically

4. Press the OK button and the rotated image will be displayed.
   If you display the rotated image on the LCD monitor, empty spaces may appear to the left and right of the image.

DPOF

■ DPOF(Digital Print Order Format) allows you to embed printing information on your memory card's MISC folder. Select the pictures to be printed and how many prints to make.

■ The DPOF indicator will display on the LCD monitor when an image that has DPOF information plays back. Images can then be printed on DPOF printers, or at an increasing number of photo labs.

■ This function is not available for Movie clips and Voice recording files.

■ When this menu is selected without inserting a memory card, you can select the [DPOF] menu but the menu can't be run.

DPOF : Standard

■ This function allows you to embed printing quantity information on a stored image.

1. Press the play mode button and press the menu button.
2. Press the LEFT / RIGHT button and select the [DPOF] menu tab.
3. Select the [Standard] menu by pressing the UP / DOWN button and press the RIGHT button.
4. Select a desired sub menu by pressing the UP / DOWN button and press the OK button.
   [Select] : Selection window for an image to print is displayed.
   - Up / Down / Left / Right : Select an image to print.
   - Zoom W / T Button : Select the number of prints.

   [All Pics] : Configure number of prints for all pictures except movie and voice files.
   - W / T button : Select a number of prints

   [Cancel] : Cancel the print setup.
5. Press the OK button to confirm the setting.
   If an image carries DPOF instructions, the DPOF indicator ( ) will show.

DPOF : Index

■ Images (except for movie clips and voice file) are printed as index type.

1. Press the play mode button and press the menu button.
2. Press the LEFT / RIGHT button and select the [DPOF] menu tab.
3. Select the [Index] menu by pressing the UP / DOWN button and press the RIGHT button.
4. Select a desired sub menu by pressing the UP / DOWN button.
   If [No] is selected : Cancel the index print setting.
   If [Yes] is selected : The image will be printed in index format.
5. Press the OK button to confirm the setting.

DPOF : Print size

■ You can specify the print size when printing images stored on the memory card. The [Size] menu is available only for DPOF 1.1 compatible printers.

● Setting the Print Size

1. Press the play mode button and press the menu button.
2. Press the LEFT / RIGHT button and select the [DPOF] menu tab.
3. Select the [Size] menu by pressing the UP / DOWN button and press the RIGHT button.
4. Select a desired sub menu by pressing the UP / DOWN button and press the OK button.

[Select] : Selection window for an image to be changed printed size is displayed.
- Up / Down / Left / Right : Select an image.
- Zoom W / T Button : Change the print size.
- OK button : Your changes will be saved and the menu will disappear.

[All Pics] : Change print size of all saved images.
- W / T button : Select a print size
- OK button : Confirm the changed setting.

[Cancel] : Cancel all of the print size settings.

※ DPOF [Size] secondary menu : Cancel, 3X5, 4X6, 5X7, 8X10

INFORMATION

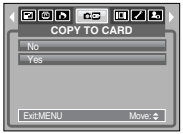
- Depending on the manufacturer and print model, canceling the printing may take a little longer for the printer to process.

Copy To Card

■ This enables you to copy image files, movie clips and voice recording files to the memory card.

● Copying to the Memory Card

1. Press the play mode button and press the menu button.
2. Select the [COPY TO CARD] menu tab by pressing the LEFT / RIGHT button.
3. Select a desired sub menu by pressing the UP / DOWN button and press the OK button.
   - [No] : Cancels "Copy to Card".
   - [Yes] : All images, movie clips and voice recording files saved in the internal memory are copied to the memory card after the [Processing!] message is displayed. After copying has been completed, the screen will return to play mode.



INFORMATION

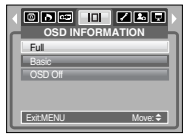
- When this menu is selected without inserting a memory card, you can select the [COPY TO CARD] menu but the menu can't be run.
- If there is not enough space available in the memory card to copy saved images in the internal memory (45MB), the [COPY TO CARD] command will copy only some of the images and display [Memory Full!] message. Then the system will return to the playback mode. Please be sure to delete any unnecessary files to free up space before inserting the memory card into the camera.
- When you move the images that are stored in the internal memory by doing [COPY TO CARD] to the card, the next number of file names will be created in the card to avoid duplication of the file name.
  - When the [Reset] of the [File] setup menu is set : The copied file names start from after the last stored file name.
  - When the [Series] of the [File] setup menu is set : The copied file names start from after the last captured file name. After completing [COPY TO CARD], the last stored image of the last copied folder is displayed on the LCD monitor.

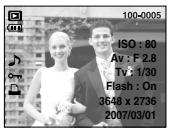
On Screen Display information

■ You can check shooting information about the displayed image.

● How to select the type of information you want to see

1. Press the play mode button and press the menu button.
2. Select the [OSD INFORMATION] menu tab by pressing the LEFT / RIGHT button.
3. Select a desired sub menu by pressing the UP / DOWN button and press the OK button.





[Full]

[Basic]

[OSD Off]

PictBridge

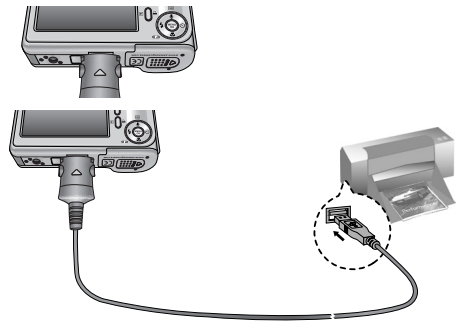
■ You can use the USB cable to connect this camera to a printer that supports PictBridge (sold separately) and print the stored images directly. Movie clips and voice files cannot be printed.

● Setting up the camera for connection with the printer

1. In any mode with the exception of Voice Recording mode, press the MENU button.
2. Press the LEFT / RIGHT button and select [SETUP] menu tab.
3. Select [USB] menu by pressing the UP / DOWN button and press the RIGHT button.
4. Select [Printer] menu by pressing the UP / DOWN button and press the OK button.

■ Connecting the Camera to a Printer

Connect the camera to a printer's USB port with the supplied USB cable.



PictBridge : Picture Selection

※ If you selected [Computer] in Step 4, when you connected the camera to your printer, the [Connecting Computer] message will display and the connection will not be established. In this case, disconnect the USB cable, and then follow the procedure from Step 2 and onward. Or, press the Printer button and the camera is connected to the printer displaying the [Connecting Printer] message. But, the camera may not connect to the printer, depending on the manufacturer and model of the printer.

■ Easy printing

When you connect the camera to printer in the Play back mode, you can print a picture easily.

- Pressing the printer( ) button :
  Currently displayed image will be printed with the printer's default setting.
- Pressing the Left / Right button :
  Selects a previous / next image.

■ Select pictures to print

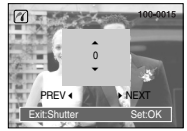
1. Press the Menu button.
2. The [IMAGES] menu will appear.
3. Use the UP and DOWN buttons to select the desired sub menu value, and then press the OK button.

When [One Pic] is selected : The PictBridge function will be applied only to the picture currently displayed.

When [All Pics] is selected : The PictBridge function will be applied to all pictures, excluding movie clips and voice files.

● Setting the Number of Copies to Print

- Select [One Pic] or [All Pics]. A screen where you can set the number of copies to print will appear as shown below.



[When [One Pic] is selected]

[When [All Pics] is selected]

- Press the Up / Down button to select the number of prints.
- When [One Pic] is selected : Use the Left / Right button to select another picture. After selecting another picture, select the number of prints for another picture.
- After setting the number of prints, press the OK button to save.
- Press the Shutter button to return to the menu without setting the number of prints.

PictBridge : Print Setting

■ AUTO SET

1. Use the LEFT and RIGHT buttons to select the [AUTO SET] menu tab.
2. Use the UP and DOWN buttons to select the desired sub menu value, and then press the OK button.

[No] : [CUSTOM SET] values are kept.

[Yes] : All values in the [CUSTOM SET] are automatically changed.

PictBridge : Print Setting

■ Custom Set : You can select the Paper Size, Print Format, Paper Type, Print Quality, Date Print, and File Name Print menus for printed pictures.

1. Use the LEFT and RIGHT buttons to select the [CUSTOM SET] menu tab.
2. Use the UP and DOWN buttons to select the desired sub menu value, and then press the RIGHT button.
3. Use the UP and DOWN buttons to select the desired sub menu value, and then press the OK button.

Menu	Function	Sub menu
Size	Setting the size of the printing paper	Auto, PostCard, Card, 4x6, L, 2L, Letter, A4, A3
Layout	Setting the number of pictures to be printed on a sheet of paper	Auto, Full, 1, 2, 4, 8, 9, 16, Index
Type	Setting the quality of the printing paper	Auto, Plain, Photo, FastPhoto
Quality	Setting the quality of the picture to be printed	Auto, Draft, Normal, Fine
Date	Setting whether to print the date	Auto, Off, On
File Name	Setting whether to print the file name	Auto, Off, On

※ Some menu options are not supported in all manufacturer and printer models. If not supported, the menus are still displayed in the LCD, but are not selectable.

※ If the setting values are not changed in the automatic / manual setting, the setting values are automatically kept.

PictBridge : Printing

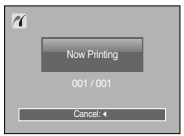
■ Printing Pictures

1. Use the LEFT and RIGHT buttons to select the [PRINT] menu tab.
2. Use the UP and DOWN buttons to select the desired sub menu value, and then press the OK button.

[Standard] : Print the pictures stored in the memory card in set numbers. One picture is printed on one piece of paper.

[Index] : Print multiple images on one sheet of paper.

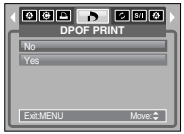
3. The screen shown on the right will appear and the picture will be printed. If no picture is selected, the [No Image!] message will be displayed. Press the LEFT button while printing to cancel the printing and the [PRINT] menu is displayed.



※ Number of pictures in an index print varies depending on the printer used.

PictBridge : DPOF Printing

■ DPOF Print : This allows you to directly print the files with DPOF information.



1. Use the LEFT and RIGHT buttons to select the [DPOF PRINT] menu tab.
2. Use the UP and DOWN buttons to select the desired sub menu value, and then press the OK button.
   [No] : Cancel the printing
   [Yes] : Directly print the file with the DPOF information

※ Depending on the manufacturer and printer model, some menus may not be available.
When a printer does not support DPOF, the menu is still displayed but not available.

PictBridge : Reset

■ Initialises user-changed configurations.

1. Use the LEFT and RIGHT buttons to select the [RESET] menu tab.
2. Use the UP and DOWN buttons to select the desired sub menu value, and then press the OK button.
   If [No] is selected : Settings will not be reset.
   If [Yes] is selected : All print and image settings will be reset.

※ Default print setting varies depending on the printer manufacturer.
For your printer's default setting, refer to the user's guide that came with your printer.

Setup menu

■ In this mode, you can set up basic settings. You can use the setup menu in all camera modes, except Voice Recording mode.
The items indicated by ▭ are default settings.

Menu tab	Main menu	Sub menu			Secondary menu	Page
	File	Series			-	p.55
		Reset			-	
	Power Off	Off, 1, 3, 5, 10 min			-	p.56
	Language	ENGLISH	한국어	FRANÇAIS		p.56
		DEUTSCH	ESPAÑOL	ITALIANO		
		简体中文	繁體中文	日本語		
		РУССКИЙ	PORTUGUÊS	DUTCH		
		DANSK	SVENSKA	SUOMI		
		ไทย	BAHASA	عربي		
		Čeština	POLSKI	Magyar		
		Türkçe	-	-		
🔧	Format	No			-	p.57
		Yes			-	
	Date&Time	07/03/01 13:00			-	p.57
		yy/mm/dd			-	
		Off			-	
		dd/mm/yy			-	
		mm/dd/yy			-	
	Imprint	Off			-	p.57
		Date			-	
		Date&Time			-	
	Sound	Off			-	p.58
		Low			-	
		Medium			-	
		High			-	

Setup menu

Menu tab	Main menu	Sub menu	Secondary menu	Page
	USB	Computer	-	p.58
		Printer	-	
	AF Lamp	Off	-	p.58
		On	-	
	LCD	Dark	-	p.58
		Normal	-	
		Bright	-	
	Video Out	NTSC	-	p.59
		PAL	-	
	Quick View	Off / 0.5, 1, 3 sec	-	p.59
	Reset	No	-	p.60
		Yes	-	
	Battery type	Alkaline	-	p.60
		Ni-MH	-	

※ Menus are subject to change without prior notice.

[File name]

■ This function allows the user to select the file naming format.

● Assigning File Names

1. In any mode with the exception of Voice Recording mode, press the MENU button.
2. Press the LEFT / RIGHT button and select the [SETUP] menu tab.
3. Select the [File] menu by pressing the UP / DOWN button and press the RIGHT button.
4. Select a desired sub menu by pressing the UP / DOWN button and press the OK button.
   - [Series] : New files are named using numbers that follow the previous sequence, even when a new memory card is used, or after formatting, or after deleting all pictures.
   - [Reset] : After using the reset function, the next file name will be set from 0001 even after formatting, deleting all or inserting a new memory card.
5. Press the menu button twice and the menu will disappear.

- The first stored folder name is 100SSCAM, and the first file name is SS100001.
- File names are assigned sequentially from SS100001 → SS100002 → ~ → SS109999.
- The folder number is assigned sequentially from 100 to 999 as follows: 100SSCAM → 101SSCAM → ~ → 999SSCAM.
- The files used with the memory card conform to the DCF(Design rule for Camera File systems) format. Do not change the image file name voluntarily. The image cannot be displayed on the camera.

Setup menu

[Auto power off]

■ This function switches the camera off after a set amount of time in order to prevent unnecessary battery drainage.

● Sub menus

[Off] : The power off function will not operate.

[1, 3, 5, 10 min] : The power will turn off automatically if not used for the period of time specified.

- After replacing the battery, the power off setting will be preserved.
- Note that the automatic power off function will not operate if the camera is in PC mode, slide show, playing back a voice recording, playing back a movie clip and taking a composite shot.

[Language]

■ There is a choice of languages that can be displayed on the LCD monitor. Even if the battery is removed and inserted again, the language setting will be preserved.

- LANGUAGE sub menu : English, Korean, French, German, Spanish, Italian, S.Chinese, T.Chinese, Japanese, Russian, Portuguese, Dutch, Danish, Swedish, Finnish, Thai, BAHASA(MALAY / INDONESIAN), Arabic, Czech, Polish, Hungarian and Turkish.

Setup menu

[Formatting a memory]

■ This is used for formatting the memory. If you run [Format] on the memory, all images, including the protected images, will be deleted. Be sure to download important images to your PC before formatting the memory.

● Sub menus

[No] : The memory will not be formatted. Press the menu button three times and the menu display will disappear.

[Yes] : A [Processing!] message appears and the memory will be formatted. If you run FORMAT in Play mode, a [No Image!] message will appear.

Be sure to run [Format] on the following types of memory card.

- A new memory card, or an unformatted memory card
- A memory card that has a file this camera can't recognise or one that has been taken from another camera.
- Always format the memory card using this camera. If you insert a memory card that has been formatted using other cameras, memory card readers, or PCs, you will get a [Card Error!] message.

[Setting up the Date / Time / Date type]

■ You can change the date and time that will be displayed on the captured images and set up the date type.

● Setting Date / Time & Selecting Date Format

RIGHT button : Selects the year/ month/ day/ hour/ minute date type.

LEFT button : Moves the cursor to the [Date&Time] main menu if the cursor is at the first item of the date and time setup. In all other cases, the cursor will be shifted to the left of its current position.

UP and DOWN buttons : Changes the setting value

- Date type : [yy/mm/dd], [Off], [dd/mm/yy], [mm/dd/yy]

[Imprinting the recording date]

■ There is an option to include DATE / TIME on still images.

● Sub menus

[Off] : The DATE & TIME will not be imprinted on the image file.

[Date] : Only the DATE will be imprinted on the image file.

[Date&Time] : The DATE & TIME will be imprinted on the image file.

※ The Date & Time are imprinted at the bottom right side of the still image.

※ The imprint function is applied only to still images except for the images taken in the [Text] scene mode and photo frame effect mode.

※ Depending on the manufacturers and print model, the date printed on an image may not be printed correctly.

Setup menu

[Sound]

■ If you set sound to ON, various sounds will be activated for camera startup, when buttons are pressed, so that you can be aware of the camera operation status.

● [Sound] sub menu : Off / Low / Medium / High

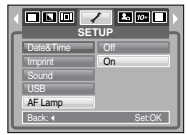
[Auto Focus lamp]

■ You can turn on and off the Auto Focus lamp.

● Sub menus

[Off] : The AF lamp will not light up in a low light condition.

[On] : The AF lamp will light up in a low light condition.



[Connecting an External Device (USB)]

■ You can select an external device to which you want to connect the camera using the USB cable.

● Sub menus

- [Computer] : Select this if you want to connect the camera to your PC.
  Refer to page 70 for instructions on how to connect the camera to your PC.
- [Printer] : Select this if you want to connect the camera to your printer.
  Refer to page 51 for instructions on how to connect the camera to your printer.

[LCD brightness]

■ You can adjust the LCD brightness.

● [LCD] sub menu : Dark, Normal, Bright

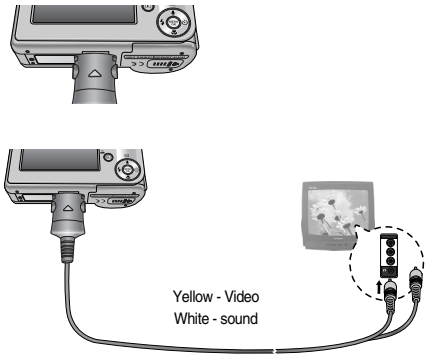
Setup menu

[Selecting Video out type]

■ The Movie output signal from the camera can be NTSC or PAL.
Your choice of output will be governed by the type of device (monitor or TV, etc.) to which the camera is connected. PAL mode can support only BDGHI.

■ Connecting to an external monitor

Connect the camera to an external monitor with the AV cable.



- NTSC : U.S.A, Canada, Japan, South Korea, Taiwan, Mexico.
- PAL : Australia, Austria, Belgium, China, Denmark, Finland, Germany, U.K., Holland, Italy, Kuwait, Malaysia, New Zealand, Singapore, Spain, Sweden, Switzerland, Thailand, Norway.
- When using a TV as an external monitor, you will need to select the external or AV channel of the TV.
- There will be a digital noise on the external monitor, but it is not a malfunction.
- If the image is not in the centre of the screen, use the TV controls to centre it.
- When the camera is connected to an external monitor, the menu will be visible on the external monitor and the menu functions are the same as those indicated on the LCD monitor.
- When selecting the PAL video out type, the TV monitor turns off and the LCD monitor of the camera turns on when you record a movie. After completing the recording, the TV monitor turns on and the LCD monitor of the camera turns off.

[Quick view]

■ If you enable Quick View before capturing an image, you can view the image you just captured on the LCD monitor for the duration set in the [Quick View] setup. Quick view is possible only with still images.

● Sub menus

[Off] : The quick view function can't be activated.

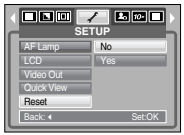
[0.5, 1, 3 sec] : The captured image is briefly displayed during the selected time.

Setup menu

[Initialisation]

■ All camera menu and function settings will be restored to their default values. However, values for DATE/TIME, LANGUAGE, and VIDEO OUT will not be changed.

● Sub menus
[No] : Settings will not be restored to their defaults.
[Yes] : All settings will be restored to their defaults.



[Selecting a battery type]

■ If a battery type is selected, the camera will be optimized according to the selected battery type.

● [Battery Type] sub Menu: Alkaline / Ni-MH

Setting up the Mycam menu

■ You can set up a start up image, start up sound and shutter sound. Every camera working mode (with the exception of Voice recording mode) has the MyCAM menu. The items indicated by [ ] are default settings.

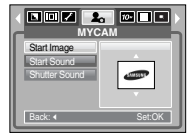
Menu tab	Main menu	Sub menu		Page
	Start Image	Off	LOGO	p.60
		User Image 1	User Image 2	
	Start Sound	Off	Sound 1	p.61
		Sound 2	Sound 3	
	Shutter Sound	Off	Sound 1	p.61
		Sound 2	Sound 3	

※ Menus are subject to change without prior notice.

Start up image

■ You can select the image that is first displayed on the LCD monitor whenever the camera is turned on.

● Start up image : [Off], [LOGO], [User Image1], [User Image2]
- Use a saved image for the start-up image with the [User Image] in the [RESIZE] menu in the play mode.
- The start-up image will not be deleted by [DELETE] or [Format] menu.
- The User images will be deleted by [Reset] menu.



Start up sound

■ You can select the sound that is activated whenever the camera is turned on.

● Start up sound : [Off], [Sound 1], [Sound 2], [Sound 3]
- If the start up image is set to [Off], the start up sound will not activate, even though you may have set these to on.

Shutter sound

■ You can select the shutter sound.

● Shutter sound : [Off], [Sound 1], [Sound 2], [Sound 3]

Important notes

Be sure to observe the following precautions!

■ This unit contains precision electronic components. Do not use or store this unit in the following locations.
- Areas exposed to severe changes in temperature and humidity.
- Areas exposed to dust and dirt.
- Areas exposed to direct sunlight or the inside of a vehicle in hot weather.
- Environments where there is high magnetism or excessive vibration.
- Areas with high explosives or highly flammable materials.

■ Do not leave this camera in places subject to dust, chemicals (like naphthalene and mothball), high temperature and high humidity.
Keep this camera with silica gel in a hermetically sealed box when not planning to use the camera for a long period of time

■ Sand can be particularly troublesome to cameras.
- Do not let sand get inside the camera when using it on beaches, coastal dunes, or other areas where there is lots of sand.
- Doing so may result in failure or may permanently render the camera unusable.

■ Handling the camera
- Never drop the camera or subject it to severe shocks or vibrations.
- Protect the large size LCD monitor from an impact. When this camera is not used, keep it in the camera case.
- Avoid obstructing the lens or the flash when you capture an image.
- This camera is not waterproof.
To avoid dangerous electrical shocks, never hold or operate the camera with wet hands.
- If you use this camera in wet places, such as beach or pool, do not let water or sand get inside the camera. Doing so may result in failure or may permanently damage the unit.

Important notes

■ Extremes in temperature may cause problems.
- If the camera is transferred from a cold to a warm and humid environment, condensation can form on the delicate electronic circuitry. If this occurs, turn the camera off and wait for at least 1 hour until all moisture is dispersed. Moisture built up can also occur in the memory card. If this happens, turn off the camera and remove the memory card. Wait until the moisture has dispersed.

■ Caution on Using the Lens
- If the lens is subjected to direct sunlight, it could result in discoloration and deterioration of the image sensor.
- Pay attention not to get fingerprints or foreign substances on the surface of the lens.

■ If the digital camera is not used for a long period, an electric discharge can occur.
It is a good idea to remove the battery and the memory card if you do not intend using the camera for an extended period of time.

■ If the camera is exposed to an electronic interference, it will turn itself off to protect the memory card.

■ Camera Maintenance
- Use a soft brush (available from photo stores) to gently clean the lens and LCD assemblies. If this does not work, lens-cleaning paper with lens cleaning fluid can be used.
Clean the camera body with a soft cloth. Do not allow this camera to come into contact with solvent materials such as benzol, insecticide, thinners etc. This may damage the body shell of the camera and also affect its performance.
Rough handling can damage the LCD monitor. Take care to avoid damage and keep the camera in its protective carry case at all times when not in use.

■ Do not attempt to disassemble or modify the camera.

■ Under certain conditions, static electricity can cause the flash unit to fire. This is not harmful to the camera and is not a malfunction.

■ When images are uploaded or downloaded, the data transfer may be affected by static electricity.
In this case, disconnect and re-connect the USB cable before trying the transfer again.

■ Before an important event or going on a trip, you should check the camera condition.
- Take a picture for testing the camera condition and prepare extra battery.
- Samsung cannot be held responsible for camera malfunctions.

Warning indicator

■ There are several warnings that may appear on the LCD display

Card Error!
- Memory card error
  → Turn off the camera power and turn it on again
  → Insert the memory card again
  → Insert the memory card and format the memory card. (p.57)

Card Locked!
- The memory card is locked
  → SD memory card : Slide the write protect switch to the top of the memory card

Memory Full!
- There is insufficient memory capacity to take an image
  → Insert a new memory card
  → Delete unnecessary image files to free up some memory

No Image!
- There are no images stored on the memory
  → Take images
  → Insert a memory card that is holding some images

File Error!
- File error
  → Delete the erroneous files.
- Memory card error
  → Contact a camera service centre

Low Battery!
- There is low battery capacity
  → Insert fresh batteries.

Low Light!
- When taking pictures in dark places
  → Take pictures in Flash Photography mode.

Out Of Number
- When selecting too many printing pages in the PictBridge menu.
  → Select printing page within the limitation.

DCF Full Error
- Violation of DCF format
  → Copy the images to a PC and format the memory.

Before contacting a service centre

■ Please check the following

The camera doesn't switch on
- There is low battery capacity
  → Insert fresh batteries. (p.9)
- The battery may be inserted incorrectly.
  → Insert the battery according to the polarity marks (+, -)
- The battery is not inserted
  → Insert the battery and turn on the camera

Before contacting a service centre

Camera does not take images when pressing the Shutter button
- There is insufficient memory capacity
  → Delete unnecessary image files
- The memory card has not been formatted
  → Format the memory card (p.57)
- The memory card is exhausted
  → Insert a new memory card
- The memory card is locked
  → Refer to [Card Locked!] error message
- The camera's power is off
  → Turn the camera power on
- The battery is exhausted
  → Insert fresh batteries.
- Battery is inserted incorrectly with the polarities reversed
  → Insert the battery according to the polarity marks (+, -)

The camera suddenly stops working while in use
- The camera stopped due to a malfunction
  → Remove /re-insert battery and switch the camera on

The images are unclear
- A picture was taken without setting an appropriate macro mode
  → Select an appropriate macro mode to take a clear image.
- The picture was taken with the subject beyond the flash range
  → Take a picture within the flash range
- The lens is smudged or dirty
  → Clean the lens

The flash does not fire
- Flash off mode has been selected
  → Dis-engage flash off mode
- The camera mode can't use the flash
  → Refer to the FLASH instruction (p.22)

Incorrect date and time is displayed
- The date and time have been set incorrectly or the camera has adopted the default settings
  → Reset the date and time correctly

The camera buttons do not operate
- Camera malfunction
  → Remove /re-insert battery and switch the camera on

A card error has occurred while the memory card is in the camera.
- Incorrect memory card format
  → Re-format the memory card

The images don't play back
- Incorrect file name (Violation of DCF format)
  → Do not change the image file name

Colour of image is different to the original scene
- White balance or effect setting is incorrect
  → Select appropriate White balance and effect

Images are too bright
- Exposure is excessive
  → Reset exposure compensation

Before contacting a service centre

No image on external monitor

- The external monitor has not been connected properly with the camera
  → Check the connection cables
- There are incorrect files in the memory card
  → Insert a memory card that has correct files

When using the PC's explorer, the [Removable Disk] file does not show

- Cable connection is incorrect
  → Check the connection
- The camera is off
  → Turn the camera on
- The operating system is not Windows 98SE, 2000, ME, XP, Vista / Mac OS 9.2 ~ 10.4. Alternatively the PC does not support USB.
  → Install Windows 98SE, 2000, ME, XP, Vista / Mac OS 9.2 ~ 10.4 to PC that supports USB.
- The camera driver is not installed
  → Install a [USB Storage Driver]

Specifications

■ Image Sensor
- Type : 1/1.8" CCD
- Effective Pixel : Approx. 10.1 Mega-pixel
- Total Pixel : Approx. 10.3 Mega-pixel

■ Lens
- Focal Length : SHD Lens f = 7.4 ~ 22.2mm (35mm film equivalent : 35 ~ 105mm)
- F No. : F2.8 ~ F7.1 (Wide), F5.1 ~ F13.1 (Tele)
- Digital Zoom : · Still Image mode : 1.0X ~ 5.0X
  · Play mode : 1.0X ~ 14.3X (depends on image size)

■ LCD Monitor : 2.7" color TFT LCD (230,000 dots)

■ Focusing
- Type : TTL auto focus
- Range : · Normal : 80cm ~ infinity
  · Macro : 4cm ~ 80cm (Wide), 50cm ~ 80cm (Tele)
  · Auto Macro : 4cm ~ Infinity (Wide), 50cm ~ Infinity (Tele)

■ Shutter
- Speed : 1 ~ 1/1,500 sec. (Manual : 8 ~ 1/1,500 sec.)

■ Exposure
- Control : · Program AE
  · Metering : Multi, Spot
- Compensation : ±2EV (0.5EV steps)
- ISO Equivalent : Auto, 80,100, 200, 400, 800, 1000

■ Flash
- Modes : Auto, Auto & Red-eye reduction, Fill-in flash, Slow sync, Flash off
- Range : Wide : 0.4m ~ 4.8m, Tele : 0.5m ~ 4.3m (ISO AUTO)
- Recharging Time : Approx. 5 sec.

■ Sharpness : Soft, Normal, Vivid

■ Effect : Normal, B&W, Sepia, Red, Blue, Green, Negative, RGB

■ White Balance : Auto, Daylight, Cloudy, Fluorescent_H, Fluorescent_L, Tungsten, Custom

Specifications

■ Voice Recording : Voice Recording (max.1 hour),
Voice Memo in Still Image (max. 10 sec.)

■ Date Imprinting : Date, Date&Time, Off (user selectable)

■ Shooting
- Still Image: · Modes : Auto, Program, Scene
※ Scene : Night, Portrait, Children (in Mode Dial), Landscape, Close-up, Sunset, Dawn, Backlight, Fireworks, Beach & Snow
※ Mode Dial : Auto, Program, Manual, Scene, Portrait, Night, Children
· Shooting : Single, Continuous, AEB
· Self-timer : 10 sec., 2 sec., Double (10 sec., 2 sec.)
- Movie Clip : · With Audio (recording time : memory capacity dependent)
· Size : 640 x 480, 320 x 240, 160 x 128
(3X Optical Zoom, Mute during Zoom Operation)
· Frame rate : 30 fps, 15 fps
· Movie Stabilizer
· Movie Editing (Embedded) : Pause during recording, Still Image Capture, Time Trimming

■ Storage
- Media : · Internal memory : Approx.45MB flash memory
· External memory : MMC/ SD card (Up to 2GB Guaranteed)
- File Format : · Still Image : JPEG (DCF), EXIF 2.2, DPOF 1.1, PictBridge 1.0
· Movie Clip : AVI (MPEG-4)
· Audio : WAV
- Image Size

10M	9M	8M	7M	6M	5M
3648x2736	3472x2604	3264x2448	3072x2304	2816x2112	2592x1944

4M	3M	2M	1M	VGA	-
2272x1704	2048x1536	1600x1200	1024x768	640x480	-

- Capacity (256MB MMC(Multi Media Card))

	10M	9M	8M	7M	6M	5M
Super Fine	48	53	60	67	80	93
Fine	94	104	115	128	157	181
Normal	109	151	169	197	223	264
	4M	3M	2M	1M	VGA	-
Super Fine	121	148	244	520	1041	-
Fine	226	284	434	868	1116	-
Normal	279	400	520	1041	1302	-

* These figures are measured under Samsung' s standard conditions and may vary depending on shooting conditions and camera settings

■ Image Play
- Type : Single image, Thumbnails, Slide show, Movie Clip
- Editing : Trimming, Resizing, Rotate, Effect

■ Interface
- Digital output connector : USB 2.0 High speed
- Audio : Mono
- Video output : NTSC, PAL (user selectable)

■ Power Source
- Primary Battery : 2 x AA Alkaline (High Capacity)
- Rechargeable battery (Optional) : SNB-2512B KIT
(2 x AA 2500mAh Ni-MH Battery & Charger)
※ Included battery may vary depending on sales region.

■ Dimensions (WxHxD) : 99.6 X 61.8 X 26.95mm (excluding protrusions)

■ Weight : Approx. 169g (without batteries and card)

■ Operating Temperature : 0 ~ 40°C

■ Operating Humidity : 5 ~ 85%

■ Software : Digimax Master, Adobe Reader

※ Specifications are subject to change without prior notice.

※ All trademarks are the property of their respective owners.

Software Notes

Please ensure that you read the instruction manual carefully before use.

- The attached software is a camera driver and image editing software tool for Windows.
- Under no circumstances should all or part of either the software or the user manual be reproduced.
- Copyrights for software are licensed only for use with a camera.
- In the unlikely event of a manufacturing fault, we will repair or exchange your camera.
  We cannot, however, be held responsible in any way for damage caused by inappropriate use.
- Using a Hand-made PC or a PC and OS that has not been guaranteed by the manufacturer is not covered by the Samsung warranty.
- Before reading this manual, you should have a basic knowledge of computers and O/S (Operating Systems).

System Requirements

For Windows	For Macintosh
PC with processor better than Pentium II 450MHz (Pentium 700MHz recommended)	Power Mac G3 or later
Windows 98SE / 2000 / ME / XP / Vista	Mac OS 9.2 ~ 10.4
Minimum 64MB RAM 200MB of available hard disk space	Minimum 64MB RAM 110MB of available hard-disk space
USB port	USB port
CD-ROM drive	CD-ROM drive
1024x768 pixels, 16bit color display compatible monitor (24bit color display recommended)	For playing back a movie clip Mac OS 10.1 ~ 10.4 MPlayer, VLC Media Player

About the software

After inserting the CD-ROM provided with this camera into the CD-ROM drive, the following window should automatically run.

SAMSUNG DIGITAL CAMERA
INSTALLER
Thank you for purchasing SAMSUNG Digital Camera.
It is strongly recommended that you exit all Windows programs before installing this program.
If the camera is connected to your computer through USB cable, please remove the cable and then click [Install].
After installing Samsung USB Driver, you can install Digimax Master and Adobe Reader.
This CD-ROM includes User Manual which is PDF file.
Install
Cancel
www.samsungcamera.com
www.samsungcamera.co.kr
User Manual

Before connecting the camera to the PC, you should first install the camera driver.

※ Screen Captures illustrated on this manual is based on English Edition of Windows.

■ **Camera driver : This enables images to transfer between the camera and PC.**
This camera uses the USB Storage Driver as the camera driver. You can use the camera as a USB card reader. After installing the driver and connecting this camera to the PC, you can find [Removable Disk] in [Windows Explorer] or [My computer]. A USB Storage Driver is provided only for Windows. A USB Driver for MAC is not included with the Application CD. You can use the camera with Mac OS 9.2 ~ 10.4.

■ **Digimax Master : This is the all-in-one multi media software solution.**
You can download, view, edit and save your digital images and movie clips clip with this software. This software is only compatible with Windows.

INFORMATION

- Be sure to check the system requirements before installing the driver.
- You should allow 5 ~ 10 seconds for running the automatic setup program according to the capability of your computer. If the frame does not show, run the [Windows Explorer] and select [Installer.exe] in the CD-ROM Drive root directory.

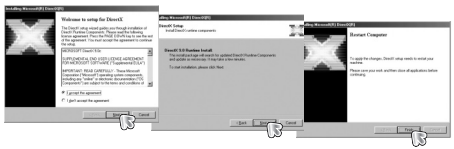
Setting up the application software

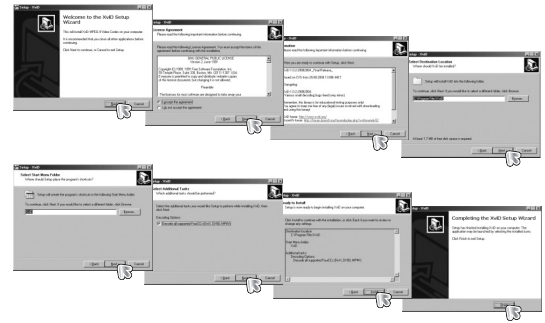
- To use this camera with a PC, install the application software first.
  After this has been done, the stored images in the camera can be moved to the PC and can be edited by an image editing program.
- You can visit the Samsung web-site through the internet.

  http://www.samsungcamera.com : English
  http://www.samsungcamera.co.kr : Korean

1. The auto run frame will display.
   Click the [Install] menu in the Auto run frame.

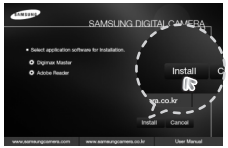
2. Install the camera driver, DirectX, Xvid and Digimax Master by selecting a button shown on the monitor. If an upper version of DirectX was installed on your computer, DirectX may not be installed.

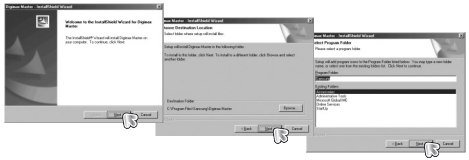


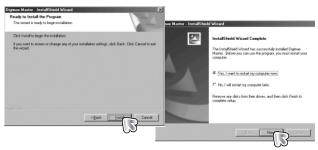


※ The XviD codec is distributed according to and under the terms and conditions of the GNU General Public License and everyone can copy, modifiy and distribute this codec freely, but WITHOUT ANY WARRANTY, IMPLIED OR EXPRESSED, OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE; provided, however, that you have to follow the GNU General Public License whenever you are distributing this codec or modification thereof.
For more information see the GNU General Publice License documents (http://www.gnu.org/copyleft/gpl.html).

Setting up the application software



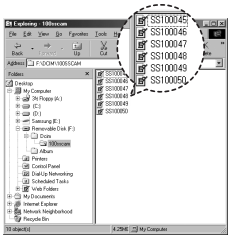




3. After restarting the computer, connect the PC to the camera with the USB cable.

4. Turn the camera power on.
   The [Found New Hardware Wizard] will open and the computer will recognise the camera.

※ If your OS is Windows XP, an image viewer program will open.
If the download window of Digmax Master opens after starting Digimax Master, the camera driver was set up successfully.



INFORMATION

- If you have installed the camera driver, the [Found New Hardware Wizard] may not open.
- On a Windows 98 SE system, the Found New Hardware Wizard dialog box opens and a window asking you to select a driver file may appear. In this case, specify "USB Driver" in the CD supplied. (for Windows 98 SE).
- PDF documents of user manual are included in the Software CD-ROM supplied with this camera. Search the PDF files with Window's explorer. Before opening the PDF files, you must install the Adobe Reader included in the Software CD-ROM.
- To install the Adobe Reader 6.0.1 correctly, Internet Explorer 5.01 or later had to be installed. Visit "www.microsoft.com" and upgrade the Internet Explorer.

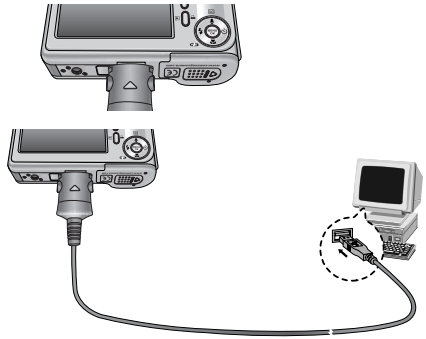
Starting PC mode

- If you connect the USB cable to a USB port on your PC and then turn on the power, the camera will automatically switch to "computer connection mode".
- In this mode, you can download stored images to your PC through the USB cable.
- The LCD monitor is always turned off in PC mode.

■ Connecting the camera to a PC

1. In any mode with the exception of Voice Recording mode, press the Menu button.
2. Press the LEFT/ RIGHT button and select the [SETUP] menu tab.
3. Select the [USB] menu by pressing the UP/ DOWN button and press the RIGHT button.
4. Use the UP and DOWN buttons to select [Computer], and then press the OK button.
5. Press the menu button twice and the menu will disappear.
6. Connect the PC to the camera with the USB cable.

■ Connecting the camera to a PC



※ If you selected [Printer] in Step 4, when you connect the camera to your printer, the [Connecting Printer] message will display and the connection will not be established.
In this case, disconnect the USB cable, and then follow the procedure from Step 2 and onward.

■ Disconnecting the camera and PC : Refer to page 72
(Removing the removable disk).

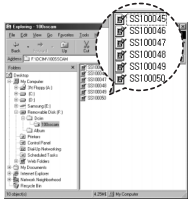
Starting PC mode

■ Downloading stored images

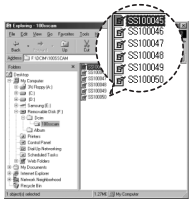
You can download the still images stored on the camera to your PC's hard disk and print them or use a photo editing software to edit them.

1. Connect the camera to your PC with the USB cable.

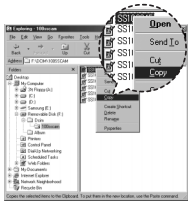
2. On your computer's desktop display, select [My computer] and double click [Removable Disk → DCIM → 100SSCAM].
The image files will then be displayed.



3. Select an image and press the right mouse button.

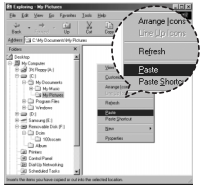


4. A pop-up menu will open.
Click the [Cut] or [Copy] menu.
- [Cut] : cuts a selected file.
- [Copy] : copies files.

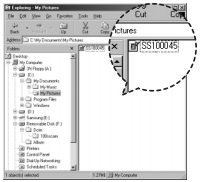


5. Click a folder where you want to paste the file.

6. Press the right mouse button and a pop-up menu will open. Click [Paste].



7. An image file is transferred from the camera to your PC.



- By using [Digimax Master], you can see the stored images in the memory directly on the PC monitor and you can copy or move the image files.

CAUTION

- We recommend that you should copy the images to the PC to view them. Opening images directly from the removable disk may be subject to unexpected disconnection.
- When you upload a file that is not taken by this camera to the Removable Disk, the [File Error!] message will be displayed on the LCD monitor in the PLAY mode, and nothing is displayed in THUMBNAIL mode.

Removing the removable disk

■ Windows 98SE

1. Check whether the camera and PC are transferring a file.
   If the camera status lamp blinks, please wait until the lamp has finished blinking and is constantly on.
2. Unplug the USB cable.

■ Windows 2000/ME/XP/Vista

(The illustrations may differ from those shown depending on the Windows O/S.)

1. Check whether the camera and PC are transferring a file.
   If the camera status lamp blinks, please wait until the lamp has finished blinking and is constantly on.
2. Double-click the [Unplug or Eject Hardware] icon on the task bar.

[Double-click!]

3. The [Unplug or Eject Hardware] window will open. Select the [USB Mass Storage Device] and click the [Stop] button.

4. The [Stop a Hardware device] window will open. Select the [USB Mass Storage Device] and click the [OK] button.

5. A [Safe to Remove Hardware] window will open. Click the [OK] button.

6. A [Unplug or Eject Hardware] window will open. Click the [Close] button and the removable disk will be removed safely.

7. Unplug the USB cable.

Setting up the USB Driver for MAC

1. A USB Driver for MAC is not included with the software CD as MAC OS supports the camera driver.
2. Check the MAC OS version during start-up.
   This camera is compatible with MAC OS 9.2 ~ 10.4.
3. Connect the camera to the Macintosh and turn the camera power on.
4. A new icon will be displayed on the desktop after connecting the camera to the MAC.

Using the USB Driver for MAC

1. Double click a new icon on the desktop and the folder in the memory will be displayed.
2. Select an image file and copy or move it to MAC.

CAUTION

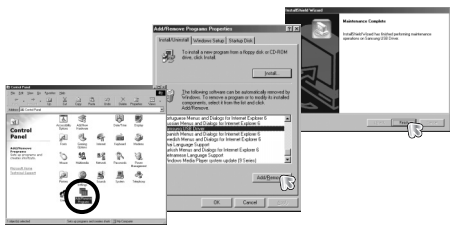
- For Mac OS 10.0 or later : First complete uploading from computer to camera and then remove the removable disk with the Extract command.
- If a movie clip can't play back on the Mac OS, please visit the following site(http://www.divx.com/divx/mac/) and download the codec. Or, use a media player that supports the Xvid codec (Mplayer, VLC(VideoLAN Client) media player).

Removing the USB Driver for Windows 98SE

■ To remove the USB driver, refer to the process shown below.

1. Connect the camera to your PC and turn them on.
2. Check whether the Removable Disk is on the [My Computer].
3. Remove the [Samsung Digital Camera] on the Device manager.

4. Disconnect the USB cable.
5. Remove the [Samsung USB Driver] on the Add/Remove Programs Properties.



6. Uninstallation is complete.

Digimax Master

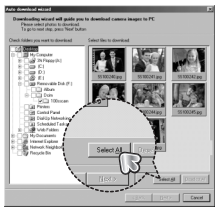
■ You can download, view, edit and save your images and movies with this software. This software is only compatible with Windows.

■ To start the program, click [Start → Programs → Samsung → Digimax Master → Digimax Master].

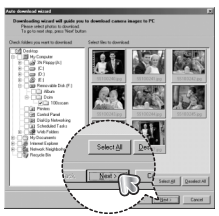
● Downloading images

1. Connect the camera to your PC.

2. A window for downloading images will display after connecting the camera to your PC.
   - To download the captured images, select the [Select All] button.
   - Select desired folder in the window and click the [Select All] button. You can save captured images and selected folder.
   - If you click the [Cancel] button, downloading will be cancelled.

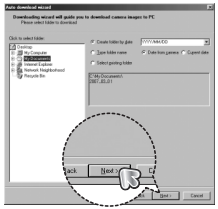


3. Click [Next >] button.



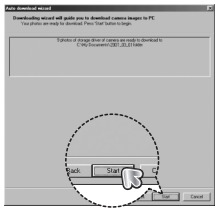
Digimax Master

4. Select a destination and make a folder to save downloaded images and folders.
   - Folder names can be made in order of date and images will be downloaded.
   - Folder name will be made as you want and images will be downloaded.
   - After selecting a folder that was made before, images will be downloaded.

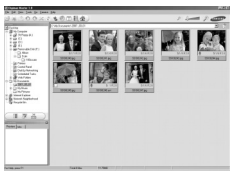


5. Click [Next >] button.

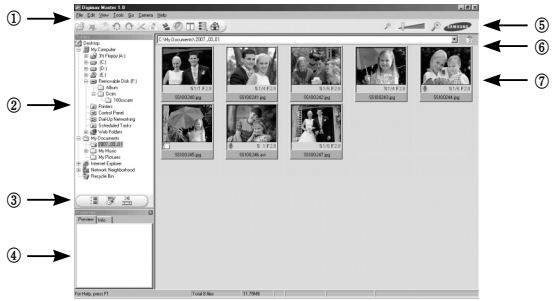
6. A window will open as shown alongside. The destination of the selected folder will be displayed on the upper side of the window. Click the [Start] button to download the images.



7. Downloaded images will be displayed.



● Image viewer : You can view the stored images.



- Image viewer functions are listed below.
  ① Menu bar : You can select menus.
  File, Edit, View, Tools, Change functions, Auto download, help, etc.
  ② Image selection window : You can select the desired images in this window.
  ③ Media type selection menu : You can select image viewer, image edit and movie edit functions in this menu.
  ④ Preview window : You can preview an image or a movie clip and check the multi media information.
  ⑤ Zoom bar : You can change preview size.
  ⑥ Folder display window : You can see the folder location of the selected image.
  ⑦ Image display window : Images of the selected folder are displayed.

※ Refer to the [Help] menu in Digimax Master for further information.

Digimax Master

● Image edit : You can edit the still image.

- Image edit functions are listed below.
  - ① Edit menu : You can select the following menus.
    - [Tools] : You can resize or crop the selected image. See the [Help] menu.
    - [Adjust] : You can modify image quality. See the [Help] menu.
    - [Retouch] : You can change image or insert effects on the image. See the [Help] menu.
  - ② Drawing tools : Tools for editing an image.
  - ③ Image display window : A selected image displays in this window.
  - ④ Preview window : You can preview the changed image.

※ A still image edited with Digimax Master can't be played back on the camera.
※ Refer to the [Help] menu in Digimax Master for further information.

● Movie edit : You can get the still image, movie clip, narration, music files together in a movie clip.

- Movie clip edit functions are listed below.
  - ① Edit menu : You can select the following menus.
    - [Add Media] : You can add other media elements to a movie.
    - [Edit Clip] : You can change the brightness, contrast, colour and saturation.
    - [Effects] : You can insert an effect.
    - [Set Text] : You can insert texts.
    - [Narrate] : You can insert a narration.
    - [Produce] : You can save the edited multi media as a new file name. You can select AVI, Windows media (wmv), Windows media (asf) and movie clip for this camera (avi, MPEG-4) file types.
  - ② Frame display window : You can insert multi media in this window.

※ Some movie clips that were compressed with a codec that is not compatible with the Digimax Master can't play back in the Digimax Master.
※ Refer to the [Help] menu in Digimax Master for further information.

Digimax Master

■ Movies for viewing on the camera : You can play back a movie on this camera

1. Select a movie for playing back on the camera by pressing the [Add] button. Insert effects and edit the movie. To save the edited movie, press the [Make] button.
2. Select [Movie for camera] video type.

3. Select Camera option, Output location, File name and press the [Make] button.
   - Frame size : Selecting the width and height of the frame.
   - Frame rate : Selecting the frame rate per second.
   - File location : Selecting a location where the edited movie is saved.
   - File name : To play back the movie on the camera, you must keep the DCF rule. Save the movie as SS10XXXX.avi (You can input any numbers between 0001 ~ 9999 instead of XXXX letters).
4. Connect the camera to the computer with the included USB cable.
5. Copy the edited movie to [Removable Disk\DCIM\XXXSSCAM]. (You can input any numbers between 100 ~ 999 instead of XXX letters)
6. You can play back the movie in the Play mode of the camera.

FAQ

■ Please check the following if the USB connection malfunctions.

Case 1 USB cable is not connected or it is not the supplied USB cable.
→ Connect the supplied USB cable.

Case 2 The camera is not recognised by your PC.
Sometimes, the camera may appear under [Unknown Devices] in Device Manager.
→ Install the camera driver correctly.
Turn off the camera, remove the USB cable, plug in the USB cable again, and then turn on the camera.

Case 3 There is an unexpected error during file transfer.
→ Turn the camera power off and on again. Transfer the file again.

Case 4 When using the USB hub.
→ There may be a problem in connecting the camera to the PC through the USB hub if the PC and the hub are not compatible. Wherever possible, connect the camera to the PC directly.

Case 5 Are other USB cables connected to the PC?
→ The camera may malfunction when it is connected to the PC at the same time as another USB cable. In this case, disconnect the other USB cable, and connect only one USB cable to the camera.

FAQ

Case 6 When I open the Device Manager (by clicking Start → (Settings) → Control Panel → (Performance and Maintenance) → System → (Hardware) → Device Manager), there are Unknown Devices or Other Devices entries with a yellow question mark(?) beside them or devices with an exclamation mark(!) beside them.

→ Right-click on the entry with the question (?) or exclamation (!) mark and select "Remove". Restart the PC and connect the camera again. For Windows 98 PC, remove the camera driver also, restart the PC, and then reinstall the camera driver.

Case 7 In some security programs (Norton Anti Virus, V3, etc.), the computer may not recognise the camera as a removable disk.

→ Stop the security programs and connect the camera to the computer. Refer to the security program instructions about how to temporarily disable the program.

Case 8 The camera is connected to the USB port located on the front of the computer.

→ When the camera is connected to the USB port located on the front of the computer, the computer may not recognise the camera. Connect the camera to the USB port located on the back of the computer.

■ When the movie clip doesn't play back on the PC

※ When the movie clip recorded by the camera doesn't play back on the PC, the causes are mostly due to the codec installed on the PC.

● When codec for play back the movie clip isn't installed
→ Install the codec as listed below.

[Installing codec for Windows]

1) Insert the CD provided with the camera.
2) Run the windows explorer and select [CD-ROM drive:\XviD] folder and click the XviD-1.1.2-01112006.exe file.

※ The XviD codec is distributed according to the GNU General Public License and everyone can copy, distribute and change this codec. This License applies to any program or other work which contains a notice placed by the copyright holder saying it may be distributed under the terms of this General Public License.
For more information, see the License documents (http://www.gnu.org/copyleft/gpl.html).

[Installing codec for Mac OS]

1) Visit the following site for downloading the codec. (http://www.divx.com/divx/mac)
2) Click the [Free Download] button located at the upper right side of the page and a window for downloading the DivX codec will display.
3) Select Mac OS you use and click the [Download] button. Save it on a folder you want to.
4) Run the downloaded file and the codec for playing back the movie clip will be installed.

※ If a movie clip can't play back on the Mac OS, use a media player that supports XviD codec (Mplayer, VideoLanClient).

FAQ

- When the DirectX 9.0 or later is not installed
  → Install the DirectX 9.0 or later
  1) Insert the CD provided with the camera
  2) Run the windows explorer and select the [CD-ROM drive:\ USB Driver\DirectX 9.0] folder and click the DXSETUP.exe file.
  The DirectX will be installed. Visit the following site for downloading the DirectX.http://www.microsoft.com/directx

- If a PC (Windows 98SE) stops responding while the camera and PC are connected repeatedly
  → If a PC (Windows 98SE) is turned on for a long time and the camera is connected repeatedly, the PC may not recognise the camera. In this case, re-start the PC.

- If a PC connected with the camera stops responding while Windows is starting.
  → In this case, disconnect the PC and the camera and Windows will start. If the problem happens continuously, set the Legacy USB Support to disable and re-start the PC. The Legacy USB Support is in the BIOS setup menu. (The BIOS setup menu differs from the PC manufacturers and some BIOS menus don't have Legacy USB Support) If you can't change the menu by yourself, contact to the PC manufacturer or BIOS manufacturer.

- If the movie clip can't be deleted, removable disk can't be extracted or an error message displays during the file transfer.
  → If you install only the Digimax Master, the problems mentioned above occasionally happen.
  - Close the Digimax Master program by clicking the Digimax Master icon on the Taskbar.
  - Install all the application programs included in the software CD.
  (You must install the Movie clip codec)

Correct Disposal of This Product

Correct Disposal of This Product (Waste Electrical & Electronic Equipment)

(Applicable in the European Union and other European countries with separate collection systems) This marking shown on the product or its literature, indicates that it should not be disposed with other household wastes at the end of its working life.

To prevent possible harm to the environment or human health from uncontrolled waste disposal, please separate this from other types of wastes and recycle it responsibly to promote the sustainable reuse of material resources. Household users should contact either the retailer where they purchased this product, or their local government office, for details of where and how they can take this item for environmentally safe recycling. Business users should contact their supplier and check the terms and conditions of the purchase contract.

This product should not be mixed with other commercial wastes for disposal.

FCC notice

■ **NOTE :**

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to pro-vide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses and can radiate radio frequency energy and, if not in-stalled and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

■ **CAUTION :**

Changes or modifications not expressly approved by the manufacturer responsible for compliance could void the user's authority to operate the equipment.

■ **Declaration of Conformity**

Trade Name	: SAMSUNG TECHWIN
Model No.	: Samsung S1030
Responsible Party	: Samsung Opto-Electronics America, INC.
Address	: 40 Seaview Dr. Secaucus,NJ 07094
Telephone No.	: 201-902-0347

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

MEMO

MEMO

MEMO

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